Appendix B



Conclusions of PTA consultation on the preliminary draft of the analysis of wholesale markets for local access provided at a fixed location and central access provided at a fixed location for massmarket products.

(Markets 3a/ 2016 and 3b 2016)

Table of Contents

IN	TRODU	CTION	5					
1	INTR	ODUCTION TO PRELIMINARY DRAFT	6					
2	DEFI	DEFINITION OF THE RELEVANT MARKETS18						
3 Al		COMPETITION CIRCUMSTANCES ON RETAIL MARKETS FOR ACCESS PROVIDED AT A FIXED LOCATION ID BROADBAND SERVICE22						
	3.1	GENERAL	22					
	3.1.1							
	3.1.2							
	3.1.3	Internet service and Iceland in international context	33					
	3.1.4	Demand on the market for Internet service	37					
	3.1.5	p	1					
	locat	ion40						
	3.1.6	•						
	3.2	DEFINITION OF BROADBAND ACCESS (INTERNET SERVICE) AT RETAIL LEVEL						
	3.2.1	,						
	3.2.2	· · · · · · · · · · · · · · · · · · ·						
	3.2.3	· · · · · · · · · · · · · · · · · · ·						
	3.2.4	Distinction between standard broadband access provided at a fixed location and wireless ser	vice					
	3.2.5		71					
	3.2.6							
4	DEFI	NITION OF WHOLESALE MARKETS						
	4.1	GENERAL	70					
	4.1.1							
	4.1.2		, 5					
	acces	ss and wholesale market for high-quality access	80					
	4.2	ASSESSMENT OF VARIOUS ACCESS TECHNOLOGY FOR THE WHOLESALE MARKET FOR LOCAL ACCESS (M3A)						
	4.2.1	•						
	4.2.2	Fibre-optic network	82					
	4.2.3	Wireless network	83					
	4.2.4	Conclusion regarding definition of Market 3a	84					
	4.2.5	Local access on offer in this country	86					
	4.3	ASSESSMENT OF VARIOUS ACCESS TECHNOLOGY FOR THE WHOLESALE MARKET FOR LOCAL ACCESS (M3b)	90					
	4.3.1	•						
	4.3.2							
	4.3.3							
	4.3.4	Central access on offer in this country	91					
5	GEN	ERAL ON DEFINITIONS OF GEOGRAPHIC MARKETS	96					
	5.1	GENERAL	108					
	5.2	BEREC COMMON POSITION ON GEOGRAPHIC ASPECTS OF MARKET ANALYSIS FROM 2014	110					
	5.3	THE IMPACT OF NEXT GENERATION NETWORKS AND NUMBER OF INFRASTRUCTURE COMPETITORS ON GEOGRAPHIC						
	ANALYSIS							
	5.4	THE RISK AND/OR GAIN FROM GEOGRAPHIC MEASURES BY AREA						
	5.5	GEOGRAPHICAL DELINEATION AND/OR VARYING OBLIGATIONS BY AREA						
	5.6	DEFINITION OF GEOGRAPHIC MARKETS IN FUROPE	120					

	OGRAPHICAL DEFINITION OF WHOLESALE MARKET FOR LOCAL ACCESS WITH FIXED CON	
. 6.1	GENERAL	
6.2	DEPLOYMENT OF NETWORKS, DEPLOYMENT PLANS AND NETWORK TOPOLOGY	
6.3	CHOICE OF AREAS FOR ANALYSIS	
6.4	THE POSITION ON THE RETAIL MARKET, WITH RESPECT TO GEOGRAPHIC ANALYSIS	
6.5	ASSESSMENT OF HOMOGENEITY IN COMPETITIVE CONDITIONS IN SELECTED AREAS	
6.5		
6.5		
6.5		
6.5		
6.5	•	
6.5	Other aspects, including marketing policy, marketing behaviour, the service offer, qua	ality of
cor	nnections and nature of demand by area	
6.6	CONCLUSION WITH RESPECT TO GEOGRAPHIC DEFINITION OF THE WHOLESALE MARKET FOR LOCAL ACCESS	
	ECTION (MARKET 3A)	
	OGRAPHICAL DEFINITION OF WHOLESALE MARKET FOR CENTRAL ACCESS PROVIDED AT DIFFERENCE OF THE PRODUCTS (MARKET 3B)	
7.1	THE PTA DECISION NO. 21/2014 WITH RESPECT TO WHOLESALE MARKET FOR BITSTREAM ACCESS	257
7.2	DEPLOYMENT OF NETWORKS, DEPLOYMENT PLANS AND NETWORK TOPOLOGY	
7.3	CHOICE OF AREAS FOR ANALYSIS	
7.3		
7.3		
7.4	THE POSITION ON THE RETAIL MARKET, WITH RESPECT TO GEOGRAPHIC ANALYSIS	
7.5	ASSESSMENT OF HOMOGENEITY IN COMPETITIVE CONDITIONS IN SELECTED AREAS	
7.5		
7.5	•	
7.6	CONCLUSION WITH REGARDS TO GEOGRAPHIC DEFINITION OF THE WHOLESALE MARKET FOR CENTRAL ACCI	
MARKE	et products (Market 3b)	264
	NCLUSION ON SMP ON THE WHOLESALE MARKET FOR LOCAL ACCESS WITH FIXED CONN	
•	·	
8.1	Introduction	
8.2	Market share	
8.3	TOTAL SIZE AND PROFITABILITY	
8.4	ENTRY BARRIERS	
8.4	,	
8.4		
8.4		
8.4	, , ,	
8.4	, -,	
8.4		
8.4		
8.4		
8.4		
_	1.10 Conclusion concerning entry barriers in the relevant market	
8.5 <i>8.5</i>	COMPETITION PROBLEMS ON THE MARKET IN QUESTION	
8.5 8.5		
8.5 8.5		
8.5	•	
0.5	7.7 I I COOUTE I UIII OUDOLILUIC DI UUULLO	

8.5.5	Customer choice and potential switching costs/the effects of binding contracts	314
8.5.6	Conclusions on competition on the relevant market	315
8.6 A	ASSESSMENT OF SMP ON THE RELEVANT MARKET (MARKET 3A)	318
8.6.1	General	318
8.6.2	Designation of a company with significant market power	318
9 ANALY	SIS OF SMP ON THE WHOLESALE MARKET FOR CENTRAL ACCESS PROVIDED AT A FIXED	
	FOR MASS-MARKET PRODUCTS (MARKET 3B)	329
	·	
	NTRODUCTION	
	Market share	
	OTAL SIZE AND PROFITABILITY	
	NTRY BARRIERS	
9.4.1	General comments on barriers to entry	
9.4.2	Control of infrastructure that is difficult to duplicate	
9.4.3	Sunk costs	
9.4.4	Economy of scale	
9.4.5	Economy of scope	
9.4.6	Access to capital	
9.4.7	Barriers to expansion	
9.4.8	Sales and service systems	
9.4.9	Vertical integration	
9.4.10	Conclusion concerning entry barriers in the relevant market	336
9.5	COMPETITION PROBLEMS ON THE MARKET IN QUESTION	337
9.5.1	Customer countervailing buying power	
9.5.2	Conclusions on competition on the relevant market	339
9.6 A	ASSESSMENT OF SMP ON THE RELEVANT MARKET (MARKET 3B)	
9.6.1	Designation of a company with significant market power	339
10 CONCI	LUSION ON SMP ON THE WHOLESALE MARKET FOR LOCAL ACCESS WITH FIXED CONNECT	TION
	Α)	
•		
	N GENERAL ON OBLIGATIONS	
	COMPETITION PROBLEMS	
10.2.1		
10.2.2	F F F F	
10.2.3		
10.2.4	· · · · · · · · · · · · · · · · · · ·	
10.2.5	, ,	
10.2.6	, , , , , , , , , , , , , , , , , , ,	
10.2.7	Summary and conclusions on competition problems related to Market 3a	423
	DBLIGATIONS IN FORCE	
10.4 A	ASSESSMENT OF IMPACT OF IMPOSED OBLIGATIONS ON MARKET 4/2008	
10.4.1	The necessity to impose and maintain relevant obligations and the impact of the oblig 425	ations
10.5 li	MPOSITION OF OBLIGATIONS PURSUANT TO THE ELECTRONIC COMMUNICATIONS ACT	432
10.6	DBLIGATIONS THAT VARY BY GEOGRAPHIC AREA	
10.6.1	The PTA conclusion with respect to varying obligations on the relevant market	432
10.7 l	MPOSITION AND MAINTAINING OBLIGATIONS	
10.7.1	Obligation to provide access	437
10.7.2	Obligation for non-discrimination	455
10.7.3	3 7	
10.7.4	Obligation for separation of accountancy	456
10.7.5	Obligation for price control	456

		ON OF OBLIGATIONS ON THE WHOLESALE MARKET FOR CENTRAL ACCESS PROVIDE N FOR MASS-MARKET PRODUCTS (MARKET 3B)	
11.1		NERAL ON OBLIGATIONS	
11.2		PETITION PROBLEMS	
11.2		General	
11.2	.2	Competition problems on the relevant market	
11.2	.3	Vertical integration and transfer of SMP	
11.2	.4	Problems related to assessment of SMP on the relevant market	
11.2.5 11.2.6		Further on competition problems related to 3b in this country	
		Cases that the Competition Authority is processing vis-à-vis the Siminn Group	
11.2.	.7	Summary and conclusions on competition problems related to Market 3b	
11.3	OBLIG	SATIONS IN FORCE	
11.4	Asses	SSMENT OF IMPACT OF IMPOSED OBLIGATIONS ON MARKET M5/2008	488
11.5	OBLIG	SATIONS THAT VARY BY GEOGRAPHIC AREA	488
11.6	Імро	SITION OF OBLIGATIONS PURSUANT TO THE ELECTRONIC COMMUNICATIONS ACT	489
11.6	.1	Obligation to provide access	489
11.6	.2	Obligation for non-discrimination	493
11.6	.3	Obligation for transparency	496
11.6	.4	Obligation for separation of accountancy	497
11.6	.5	Obligation for price control	497
11.6	.6	Obligation for cost accounting	500

Introduction

This document contains a summary of conclusions and comments received in the Post and Telecom Administration (PTA), preliminary draft of the analysis of wholesale markets for local access provided at a fixed location and central access provided at a fixed location for mass-market products, Markets 3a/2016 and 3b/2016. The preliminary draft was submitted to stakeholders for consultation with a letter dated 30 April 2020 and was thus completed on 10 July of the same year.

The following parties submitted comments on the preliminary draft.

- Competition Authority (CA)
- Gagnaveita Reykjavíkur ehf. (GR)
- Tengir hf. (Tengir)
- Nova hf. (Nova)
- Sýn hf. (Vodafone)
- Síminn hf. (Síminn)
- Míla ehf. (Míla)
- Stykkishólmsbær
- Snæfellsbær
- Fjarðabyggð

Comments from the above specified parties have been categorised by subject, section and paragraph. Endeavours have been made to identify all significant comments. At the end of each comment there is a summary of the position of the PTA.

1 Introduction to preliminary draft

GR welcomes that this draft market analysis is in the consultation phase. The electronic communications market has been waiting for a revised market analysis, as it is important for market stability that the rules should be clear. There was also the fact that many matters of opinion with respect to the market analysis in force had arisen, which were among other things covered in the market analysis now under discussion, under the heading "competition problems".

GR strongly emphasised the importance of the PTA ensuring that there was effective competition on the wholesale markets in question, as this was a fundamental prerequisite for effective competition to flourish at retail level. This meant that obligations had to be imposed on Míla to assure access for others to markets and to level the competition position with Míla, which at the same time had market dominance and enjoyed significant dominance in geographic distribution of networks. GR also considered it important that the PTA took into account when imposing obligations on Míla, that the company was a subsidiary of Siminn, which was the largest electronic communications company on the electronic communications retail market and also in content providing in the understanding of the Media Act.

In the opinion of GR, for these reasons, obligations should not only be imposed on the Míla copper network but also on the company's fibre-optic network, because, as PTA statistics showed, Míla fibre-optic network had expanded quickly during the last years.

The position of the PTA

The PTA agrees that it is important for stability on the market that the rules are clear on the relevant electronic communications markets and that the PTA had identified certain competition problems on these markets, where the intention was to resolve them by imposing obligations on Míla with this market analysis.

According to the PTA Decision no. 21/2014, various obligations are imposed on the Míla fibre-optic network, such as for access, for non-discrimination and for transparency. There was however no obligation for price control. In the PTA preliminary draft market analysis, the PTA planned to impose such an obligation on the Míla fibre-optic network in the form of cost analysed prices. On 30 October 2020, the PTA opened consultation on specific changes to the preliminary draft, which was completed last 27 November. In that case, the PTA opened consultation among other things on changes to the above specified obligation for price control, such that it would be in the form of an economic replicability test (ERT) instead of cost-analysed price. Further details of the reasons for this will be provided in Sections 10 and 11 here below, where comments related to obligations will be answered, in the same Sections of the updated original draft (Appendix A) and in Appendix C, where comments related to the above specified additional consultation are answered.

Tengir says that it broadly agrees with the conclusions reached by the PTA in the preliminary draft, subsequent to a detailed market analysis. This applied among other things to definitions of the wholesale markets in question, which were both markets on which Tengir traded.

The position of the PTA

The PTA considers that the above specified comments by Tengir support the PTA conclusion, among other things with respect to the definition of the relevant service markets and the geographic definition of the markets in question, but in other respects does not see the need to make further comments here on this matter.

Vodafone welcomes the market analysis in question and in the main, supports it. In the light of the extremely serious state of the electronic communications market in Iceland as a whole, as Siminn has succeeded with breaches of competition, to increase its share of the market and to significantly reduce the competitiveness of its competitors, Vodafone considers it extremely urgent that clear rules be imposed on Markets 3a and 3b.

Vodafone broadly supported the analysis in all main respects, with regards to definitions of Markets 3a and 3b and to the obligations that the PTA intends to impose on Míla, but with certain reservations, however. Vodafone considered it to be of vital importance for the health of the electronic communications market, i.e., healthy competition, that Míla should be subject to very clear and unequivocal obligations on offer of service and price, as very many breaches of competition by the Siminn Group from the time that competition commenced on the market, had demonstrated how important this was. Not least because of Siminn behaviour during recent years, in connection with bundling TV material with Siminn electronic communications service and Míla electronic communications service in an illegal manner, through the Siminn Home Package. Complaints about a large number of breaches of competition were now under investigation at the Competition Authority and one such complaint had been concluded with a decision on a breach of the Siminn Settlement with the Competition Authority, see Competition Authority Decision no. 25/2020, dated 28 May 2020.

On 18 July 2020, a news item was published about Siminn having had made an agreement with GR which enabled Siminn to sell e.g. TV service (IPTV set-top box service) to customers on the GR access system, and who were customers of Siminn competitors in Internet access service, such as Vodafone, Nova and others, who were defenceless against the incursion of Siminn into the GR system, with respect to offers where Siminn bundled TV material with electronic communications service, even in an unlawful manner, without any barriers through a central connection with GR, in the same manner that Siminn had practised on Míla systems for years on end, and that had last been confirmed with the above specified Competition Authority Decision no. 25/2020 and prior to that with the PTA Decisions from 2018 and 2019, on a seeming breach of paragraph 5 of article 45 of the Media Act.

The position of the PTA

The PTA considered that the above specified comments from Vodafone broadly supported the conclusions of the Administration's preliminary draft, among other things with respect to definition of the relevant service markets and the geographic analysis.

Vodafone considers that Míla needed to be subject to very clear and unequivocal obligations on the offer of service and on price, in order to ensure healthy competition. In its preliminary draft, the PTA planned to impose an obligation for price control on Míla in the form of an obligation for cost analysed prices both on the company's copper and fibre-optic networks. This obligation only applied to the company's copper network in the analysis from 2014. In

the additional consultation that was opened on 30 October 2020, the PTA proposed on the other hand, that the obligation for price control on Míla on the company's fibre-optic network would be in the form of an economic replicability test (ERT). Reference is made to the discussion in Sections 10 and 11 here below, in the same sections of the revised draft (Appendix A) and to Appendix C, where comments from the additional consultation are answered, in support of the above.

The PTA agrees with Vodafone that it is important that clear rules apply on the wholesale markets in question.

The competition problems described here above by Vodafone are discussed in the relevant sections of the draft market analysis and the PTA endeavoured to resolve them with planned obligations to the extent possible, having respected proportionality.

Vodafone refers to the fact that Siminn had made an agreement with GR on Siminn entry to the GR fibre-optic network. The PTA cannot prevent such agreements with obligations in the market analysis. This agreement can be positive for competition between GR and Míla on the relevant wholesale markets but represents a challenge for Siminn competitors on retail markets. All things being equal, the GR market share could then increase somewhat at the expense of Míla at the same time as the Siminn market share could increase at the cost of its competitors on retail markets, and the Siminn market share was just over 46% on the retail market for Internet service at the turn of the year 2020/2021. It is the task of the Competition Authority to discuss whether behaviour of parties on the retail market comply with competition law and with the Settlement that the Siminn Group has made with the Competition Authority.

Míla says that one should view Míla's main comments, the report from Analysys Mason from 1 July 2020 (commissioned by Míla) and the document with comments on individual paragraphs as a single entity.

The position of the PTA

The PTA will examine all these documents as a whole when Míla comments are examined and answered.

Míla states that the PTA appears to assume that a special consultation will take place on obligations when the conclusions of this consultation are established and, in this respect, refers to paragraph 10 in the preliminary draft. All rights are reserved in this connection.

The position of the PTA

In the initial phase of the market analysis in question, the PTA had planned to open a special consultation on definition of the relevant service markets, geographic markets and on evaluation of the status of competition and on the designation of parties with significant market power on the one hand and on the imposition of obligations on the other. The PTA decided not to do this and opened consultation on all these issues, as is clearly stated in the preliminary draft. The PTA however omitted to change the reference text in paragraph 10, which reflected this change. Míla made very detailed comments on imposed obligations, so the PTA cannot see that it had impinged on the company's right to object. In addition to this

the PTA opened the additional consultation on specific aspects of the draft market analysis on 30 October 2020.

Míla states that, as would be later argued in more detail, the company disagreed in significant respects with the conclusions of the preliminary analysis, including the PTA market analysis, the position of Míla on defined markets and the necessity and legality of the obligation that the PTA planned to impose on Míla. Furthermore, that the PTA has far from fulfilled its obligation to investigate and other procedural rules of the Administrative Procedures Act and the main principles of administrative procedures law on which they were based in the treatment of this case.

The position of the PTA

The PTA will discuss specific comments from Mila in more detail, later in this document. The PTA however does not agree with Mila that there was a lack of investigation of the case, as this was a very detailed market analysis. Further investigation and gathering of data subsequent to this consultation, that took place during the period 30 April to 10 July, broadly supports the conclusions presented in the preliminary assessment. The PTA then opened an additional consultation on 30 October 2020, about a number of issues that the PTA considered appropriate to change from the preliminary draft, such as issues relating to geographic analysis, imposition of price obligations and that fibre-optic lines should continue to belong to Market 4 (previously Market 6/2008 for terminating segments of leased lines) and not be moved to Market 3a. The PTA furthermore opened consultation on substitutability assessment for copper and fibre-optic and on a consumer survey that the Administration commissioned in the autumn of 2020, but the PTA did not consider there to be reason to change its position that there was still substitutability between these technical solutions on the markets in question.

Míla states, as would be explained in more detail later, that it was clear that the preliminary draft contained significant material limitations that would have to be remedied before a final decision was made in the case. It was established that the conclusion of the analysis would have an enormous impact on Míla interests and on circumstances on the market in the long term, as the decision was binding for the market for the coming years, or until the PTA decided to review the market again, and as experience clearly shows, it was uncertain when that would be. For this reason, it was even more important now to work carefully, that the PTA execute adequately its duty to investigate at all stages of the investigation and that it respects considerations on the necessity and proportionality in connection with any kind of decision, including on the imposition of obligations on companies operating on the market.

The position of the PTA

The PTA disagrees that the preliminary draft contained significant material limitations or that the investigation has been deficient. As has been stated, the PTA opened an additional consultation on specific parts of the preliminary draft after having investigated the case further and having gathered data. In accordance with the principle of proportionality, the PTA decided to propose to lessen to some extent the burdensome impact of the obligations, among

other things with respect to the obligation on Míla for price control for fibre-optic connections, and in addition to this, more areas were subject to lighter obligations.

Siminn considered in general that the PTA had not yet conducted the actual market analysis, as necessary data and views had not been gathered and for this reason it was necessary to embark on such an investigation. On the contrary, there were many declarations and views on issues that were not supported in the data and that were used as grounds as though the data were available. When the PTA data list is examined, it is manifest that most of the PTA opinions were conjecture. There was substantial discussion on issues and many instances of repetition of issues that appeared not to be relevant to resolution of the case.

It therefore seemed as though the PTA had published the market analysis for the purpose of receiving comments. Normal procedure would have been to send a list of questions about various issues, request appropriate data and on the basis of such an investigation produce a draft market analysis, as a market analysis should in fact be made in such a manner that it would be an analysis that was close in form to being an administrative decision.

The key point was that in the PTA analysis the Administration had neglected to investigate the case. No data have been gathered on issues that were important for definition of markets, both product markets and geographic. Siminn proposed that the PTA performed its key role and conducted the actual investigation of the service markets in question. It would be of value for the future of electronic communications in Iceland that the Administration embarked on professional evaluation of whether there was in fact substitutability between xDSL service and fibre-optic service, i.e., to what extent consumers with fibre-optic service switched to xDSL service, instead of assuming this as a fundamental criterion on which to base administrative decisions.

There was furthermore no investigation made on whether there was effective competition on the market, yet simple indications such as price and quality should have demonstrated that effective and very strong competition was certainly in place, contrary to what the PTA asserted.

This then led to the problems that the PTA considered to exist were not in accordance with reality. This meant that obligations were imposed that achieved no objectives, they neither led to increased competition, nor did they lead to new parties competing or offering fibre-optic service where it was needed. On the contrary, the planned PTA measures reduce the incentive to invest, which means that the quality of service would not increase.

The position of the PTA

The PTA totally disagrees with the contention that it has not made an actual market analysis and has thus neglected its duty to investigate or that it has based its preliminary draft on conjecture. This was a very detailed analysis, based among other things on statistical data by municipality. The PTA furthermore used various indications for potential and real competition problems as grounds. Subsequent to this consultation, which took place from 30 April to 10 July 2020, the PTA investigated certain issues in more detail and gathered various data from electronic communications companies and commissioned a consumer survey.

In the opinion of the PTA, this detailed investigation and gathering of data resulted in there being no perceived reason to alter the PTA preliminary assessment - that there was still substitutability between copper and fibre-optic networks on the markets in question.

The PTA totally rejects that it has not made an adequate investigation of competition on the markets in question and on corresponding retail markets. It was stated there among other things, that the Míla market share was still very high on the relevant markets and that the Siminn market share on corresponding retail markets had not decreased by much since 2014 and was at just under 50%. Very many other issues were examined, such as vertical integration, entry barriers, economy of scale and economy of scope. When this is all taken into account, the PTA considered it perfectly clear that Míla still had significant market power on the relevant wholesale markets.

Then the PTA give a detailed description of potential and real competition problems that the Administration considered to exist on the relevant markets and proposed obligations that the Administration considered would achieve the desired objectives and that were in accordance with proportionality, particularly after the changes that the PTA proposed in the additional consultation which was opened 30 October 2020. One consideration among others that was taken into account was not to diminish the incentive to invest, by withdrawing the intention to impose an obligation on Míla for cost analysed prices for the company's fibre-optic network and by proposing instead an obligation for an economic replicability test (ERT).

Siminn considered that the conditions set by the PTA for it being possible to separate markets geographically were unrealistic and did not reflect the actual difference in competitive conditions. There were no arguments to support how the conditions in question reflected the variations in competitive conditions. It seemed as though the PTA had gone as far as possible to avoid defining geographic markets. It was for example absurd to maintain that Míla was a dominant player on the local loop market in the Tengir operational area, as according to the PTA analysis, Tengir had 50 to 60% market share; or that Siminn was a dominant player in the Capital City Area with under 40% market share in retail of Internet service.

The PTA conclusion led to an underestimation of the strength of those parties that offered fibre-optic service, such as for example Tengir and GR. The PTA was in fact implementing measures that the EU Commission had objected to with the PTA sister institution in Sweden. It was obvious that the EFTA Surveillance Authority (ESA), which was bound by the main principle of homogeneous interpretation of EEA rules, would follow the precedent set by the Commission and would therefore make serious reservations about the lack of an analysis by the PTA.

The position of the PTA

The PTA does not agree that the conditions that the Administration set for it being possible to differentiate geographic markets were unrealistic, did not reflect the actual variations in competitive conditions between areas and that arguments were lacking. The PTA geographic analysis is very extensive and is grounded on guidelines from the EU Commission, ESA and BEREC and takes into account the practices of the PTA sister institutions in Europe, having taken into account the structure of the market and competitive conditions in this country. The PTA then deals in detail with the variations in conditions in this country and in Sweden.

It was the PTA conclusion, which is based among other things on the basic premise that there is still substitutability between copper networks and fibre-optic networks on the relevant markets, that competitive conditions are not sufficiently heterogeneous between regions to justify segregating into geographic markets in this country. Consumers between areas, do not perceive a difference that would justify such segmentation. On the other hand, however, the PTA considered that competitive conditions between municipalities where there was on the one hand, little or no competition in place and on the other hand where there was more competition, justified lighter obligations in the latter specified area. In the additional consultation opened by the PTA on last 30 October, the PTA announced that there would be slackening of the requirements that were made for a municipality to belong to a region with lighter obligations. They are inhabited by more than 70% of the country's population.

The PTA refers to detailed discussion on geographic analysis in Sections 5-7 in the updated original draft (Appendix A), to the PTA position on the detailed comments from Míla and Siminn in the same sections in this document on geographic analysis and to Appendix C, which discusses the above specified additional consultation with respect to the criteria for lighter obligations by region.

Siminn said that there was no legal authority for imposing obligations on a company like Míla on markets where the company hardly had the fibre-optic to compete with competitors who had furthermore, higher market share than Míla. In the opinion of Siminn, the PTA was imposing obligations on the wrong party in the regions in question. With respect to the areas where Míla had xDSL and where there was no competitor to Míla, it was obvious that the PTA should structure the obligations such that they would strengthen investments in fibre-optic. That would have the effect of increasing the likelihood that new players would want to offer retail Internet service. The PTA plans made sure that neither Míla nor other private parties would deploy fibre-optic in the areas in question. The marketing environment in the relevant areas would thus remain unchanged throughout the lifetime of the analysis. Siminn could not see how this would strengthen competition for the benefit of consumers.

On the basis of investigation of the market in this case, the PTA would need to apply measures where there was verifiable market dominance and ensure that fibre-optic was deployed to as many locations as possible. The key issue here would be to evaluate the areas where economic reasons would justify deploying fibre-optic, and to encourage this, instead of discouraging. As the areas were such that they were economically challenging for operations of two or more parties with bitstream service on top of a fibre-optic system, it would be necessary to ensure access on an equal footing, and if there were indications that a company was charging too much, the PTA could intervene, but not until such a situation existed.

The position of the PTA

The PTA points out that the above specified comments from Siminn are based on the assumption that the PTA will come to the conclusion that substitutability does not exist between copper and fibre-optic networks. The PTA has however come to the conclusion that such substitutability does exist. The above comments are therefore based on false premises, and therefore no reason to provide further reaction to them here.

The PTA does however point out that the Administration plans, subsequent to the above specified additional consultation, to relax the price obligation that was planned in the preliminary assessment such that a cost analysed price for Míla fibre-optic will not be prescribed but rather that the Síminn Group will pass an economic replicability test (ERT). The PTA furthermore does not agree that an obligation on price control on the Míla fibre-optic tariff or a non-discrimination obligation, regardless of whether it is a cost analysed price for Míla fibre-optic or an ERT obligation on the Siminn Group, would diminish willingness to invest by Míla competitors on the relevant markets.

Siminn pointed out that the PTA proposals on applying single price did not only have a negative impact on Míla investments, but also on the incentive for other parties. The proposal on single price was simply and generally recognised as a measure that would finally result in fibre-optic not being deployed on market grounds, as it was clear that a company could not make the decision to invest in a project that did not return profits. In this manner, the PTA intended that taxpayers should fund development in the future that the private sector would otherwise have implemented.

It was important that the PTA made its own market analysis and publicly announced as soon as possible that single price for the whole country would not be applied. It was clearly not the role of the PTA to level the position of consumers across the whole country, but rather a political decision that the Althingi needed to make with legislation, and then the companies in question should be compensated for such a loss with state support, or direct tax funds in another manner to the development projects. It was not necessary to impose obligations subsequent to market analysis in order to impose universal service obligations, which the PTA seemed to be doing with its proposals. These were distinct evaluations. It was the nature of effective competition that parties were free to decide their pricing having taken into account the varying conditions, cost, potential revenue and other future criteria. This is something that the PTA should look at.

The position of the PTA

The PTA repeats that subsequent to a detailed evaluation of competitive conditions in this country and in accordance with the EU recommendation from 2013 on the obligation for non-discrimination and for cost analysis methods and related additional consultation, the PTA had decided to prescribe that Síminn Group passes an ERT test rather than cost analysed prices for the Míla fibre-optic. This had among other things been done to make concessions to the position taken by Míla and Siminn, that an obligation for cost analysed prices could lessen the Groups willingness to invest in the countryside. The PTA does however not agree that price obligation on Míla fibre-optic will lessen the willingness to of Míla competitors to invest on the relevant markets.

Siminn considered it proper to emphasise a number of key issues, which will be explained in more detail in the relevant Sections at a later point.

First, it was necessary to note that Siminn TV service was on offer across all electronic communications systems and in the same manner in all systems, i.e., basic service with a

limited number of set-top boxes. It was also undisputed that there was no difference in the service with respect to quality, according to which system the party in question was on, i.e., that the platform independent Siminn solution was technically adequate for consumers and returned the best performance available. This means that the whole PTA evaluation of the Siminn offer of TV service was wrong and needed to be reviewed. Future development was being assessed, which means that the current status needs to be evaluated. It was also a fact that a number of foreign parties offered service in Iceland and the media giant Disney would commence service in Iceland on 15 September 2020, where customers could purchase the company services for Euro 6.99.

Second, Siminn had also almost completed negotiations with GR on bitstream service and this would inevitably have a significant impact on the PTA evaluation, which is based on such agreements not being in place and seems to assume that such an agreement would not be signed. This would naturally have an impact on the number of Míla connections in GR territory and again should have an impact on assessment of the position of GR. [...]

Third, the PTA service definition was wrong. No investigation was made on substitutability of various services, but rather it was asserted that certain elements were part of the same market while other elements were excluded, such as xDSL being part of the same market as FTTH, while service through cable was not. And Internet services through mobile phone systems such as 4G or 5G are simply excluded without any reasoning. The PTA is obliged to be forward-looking in this connection, but it was clear that this was not the case. The PTA analysis simply lacked data, which meant that it carried no weight.

Fourth, it was hardly possible to dispute that markets for fixed line service were geographically segmented and that in fact all criteria were fulfilled in this respect, and in reality, it was inconceivable to maintain that market conditions in operational territory of GR or Tengir were in some way similar to the conditions in East Iceland and the West Fjords. Simple and clear matters such as market share of Tengir and GR in their own operational territory compared with other areas were ignored. In reality, one hardly needed more indications that Iceland was not a single market.

Fifth, a PTA analysis of competition at retail and wholesale levels was not available and in contradiction with other assertions made by the PTA that the quality of electronic communications services in Iceland was among the best-known in the world, while at the same time, the PTA also said that the price of electronic communications in Iceland was among the lowest known in the world. It was a mystery to Siminn how it was possible to assert that there was no effective competition when quality and price in Iceland were among the most advantageous on offer to consumers in the world. If this was not confirmation of effective competition, then it was not clear what effective competition was. Furthermore, the PTA did not provide the definition that the Administration used for the concept of effective competition.

Sixth, the inadequate PTA investigation meant that wrong obligations were being imposed on the market that had in reality no meaning for competition on the retail market, except a negative impact, as access for retailers and thus consumers to fibre-optic connections would diminish at many locations across the country, as a result of the obligations. The obligations should rather support that parties would increase the speed of fibre-optic connections, particularly at locations where xDSL service was prevalent. Obligations were widely

withdrawn where parties had reached agreements on commercial terms without regard for obligations. The PTA could take account of such precedent in order to encourage Míla to make agreements on rollout of fibre-optic for access to the Míla fibre-optic network.

The position of the PTA

The PTA states that Síminn's Heimilispakki (Home Package) has enjoyed great popularity since the autumn of 2015, when the company first offered this bundle of electronic communications and TV services, which among other things included the Sjónvarp Símans Premium content provider. Other electronic communications companies have found it difficult to emulate this product bundle. The PTA came to the conclusion in its Decision no. 10/2018, dated 3 July 2018, that Siminn had breached the provisions of paragraph 5 of article 45 of the Media Act on the grounds that the Siminn content provider directed its customers at related electronic communications companies, i.e., Míla and Siminn. The District Court of Reykjavik confirmed on 1 July 2020 the PTA decision in part with its judgement. Siminn had among other things, breached the rights of GR in that provision of visual linear content (Sjónvarp Símans Premium) had not been on offer on the GR fibre-optic network, but only through Míla, in the GR operational territory. This judgement has now been appealed to the National Court and a verdict is expected in late in the year 2021.

In the autumn of 2018, Siminn began to offer access to Sjónvarp Símans Premium independent of the underlying network. The PTA came to the conclusion in its decision no. 27/2019, dated 25 November 2019, that such a solution had not absolved the company of the breach against the provisions in question of the Media Act. Among other things, customers needed to lease a special set-top box from Siminn in order to access the content through the underlying GR network. The PTA had however not been able to assert that the breach in question had been committed for a longer period than until the beginning of October 2019, because then Vodafone did not wish to enter negotiations with Siminn on distribution of the content provider in question over Vodafone's IPTV system. One can also mention that there had been little uptake of the Siminn TV service with the technical solution in question or just around [...] at the turn of the year 2020/2021. Simin appealed this decision to the Appellate Committee for Electronic Communications and Postal Affairs. With a ruling of the Committee, the PTA decision was declared void as the Committee considered that the PTA had not adequately argued that the above specified set-top boxes belonged to the electronic communications division of Siminn and not to the company's TV division. The Committee took however no material position in the case. In February 2021, Síminn announced plans to offer the content in question and other television content with an OTT solution without customers having to rent a special set-top box from Síminn, e.g., via Apple TV. The implementation of that service is expected to be completed in the autumn of 2021.

Siminn and GR reached an agreement in July 2020 on Siminn bitstream access to the GR fibre-optic network. This access became active in late August 2021. In its revised analysis, the PTA has endeavoured to assess the impact of this agreement during the lifetime of the analysis, and the PTA has gathered data from both Siminn and GR on the likely volume of transactions in the coming years. Siminn has however not made an analogous agreement with Tengir, [...]. Siminn has furthermore not made such agreements with parties like Snerpa or Austurljós, which have deployed fibre-optic in their territories in the Westfjords and East Iceland.

The PTA rejects having been remiss in its assessment of substitutability between copper and fibre-optic networks or of such fixed networks and of 4G or 5G mobile networks. Subsequent to the consultation that was opened on 30 April 2020, the PTA investigated this issue in more detail and called for detailed information from electronic communications companies and commissioned a consumer survey for the purpose of determining consumer perceptions on these issues. This additional investigation did not alter the PTA position on these issues, i.e., that there is substitutability between copper and fibre-optic networks, but not between such fixed networks and the above specified mobile phone solutions. The PTA also considers that cable systems, such as that operated by Kapalvæðing in Reykjanesbær do not constitute substitutable service to copper or fibre-optic networks in Market 3a, because among other things it is not technically possible to offer local loop service on that network. The same can be said about Market 3b, as the distribution of this system and its uptake, and thus the Kapalkerfi market share, is very small at a national level and nor is it very high in the municipality in question. The system served 3842 spaces in Reykjanesbær at the end of 2020 and uptake of the system is [...]. The cable system of Kapalvæðing is however a part of the retail market of mass market internet access service.

With respect to the comments that there should be a segmentation of geographic markets, reference is made to detailed discussion on this issue in Sections 5-7 in the updated preliminary drafts (Appendix A) and to the same section later in this document that deals with this issue.

The PTA does not accept that there is no analysis of competition at retail and wholesale levels, or that it is inadequate. The preliminary draft, and even more the draft that was revised after the above specified consultation, contain a detailed analysis of both the retail and wholesale markets. There is no equals sign between Iceland being a leader in Europe, with respect to quality and pricing of electronic communications services and that competition is effective in this country. In order to assess these issues, the PTA follows guidelines that the EU and ESA have published, having taken into account the circumstances in this country. The conclusion was that competition was not effective in this country, neither at retail nor wholesale level. For further details reference is made to the appropriate Section in the updated preliminary drafts (Appendix A) and to discussion later in this document.

The PTA also reiterates that it does not agree that wrong obligations were imposed on the market. It is certainly true that the PTA, subsequent to additional consultation, withdrew its plans to impose a cost analysis obligation on the Míla fibre-optic network and instead to prescribe that Síminn Group passes an ERT test. This was among other things done in order to take into account comments from the Siminn Group to the effect that a cost analysis obligation could inhibit the Group's willingness to embark on further development of FTTH in the countryside. The PTA furthermore reiterates its position that neither a cost analysis obligation nor ERT would inhibit the willingness of competitors of the Group to embark on such development. In addition to this, the PTA plans to propose an increased and more transparent obligation for access to Míla ducts and conduits in areas with less competition (approximately 30% of the country's population).

The Competition Authority (the CA) noted that the Administration had examined the PTA preliminary draft market analysis of the markets in question. It was stated that the CA

examination of the draft had been limited to the definition of the relevant service or product markets and geographic markets and to those factors that one could assume would have an impact when assessing potential barriers to entry to markets and the necessary obligations imposed. In the draft, the markets in question were defined in advance in accordance with the role of the PTA. In accordance with this role, the PTA had assessed the circumstances on these markets and development since the last analysis and likely development during the coming years. The CA raised no objections to that part of the draft that it had examined and considered that the analysis was in this respect well implemented and that it served its objectives.

The CA however noted that the Administration had the role of exercising the provisions of competition legislation on the electronic communications market. The conclusion reached by the CA on definitions of markets and of the positions of companies is decided by events in each individual case. This applied among other things to potential connections between distinct electronic communications services and the impact of the position of parties at various sales levels. In the light of this, then the CA would clearly not be bound by the methodology and the opinions expressed in the draft when, in the future, it might deliberate cases related to the markets in question.

The position of the PTA

The PTA considers that the above the CA comments support the PTA draft analysis and considers there to be no reason to discuss them in further detail here.

2 Definition of the relevant markets

The Competition Authority (the CA) considers the PTA approach to defining the relevant retail and wholesale markets to be logical, i.e., that conditions at retail level and how Míla customers (e.g., Siminn) implement their product development and retail operations vis-à-vis end users (consumers), could be an indication of demand-side substitutability and of a business pattern that should be taken into account when defining product or service markets.

The CA considered it relevant in this connection that service providers like Siminn, that was apparently Míla's largest customer, and probably the largest purchaser of local loops on the one hand and bitstream service on the other in wholesale on the Icelandic electronic communications market, sold access to local loops in retail to users against payment of a line charge. For example, to the best of the CA's knowledge, Siminn had not made any distinction in its retail operations between whether resold local loops were on fibre-optic or copper network, neither in marketing to end users or in other terms of business. On the contrary, the CA had become aware that the company had based its sales campaigns in recent years on there being substitutability between copper and fibre-optic local loops.

In addition to this, the CA considered there to be indications that competition was significantly limited in retail for local loop access when one considered the fact that there had been little or no price competition in line or access charges in recent years.

With respect to retail of Internet service with Siminn and other retail companies, no distinction seemed to be made in the tariffs of these companies to consumers as to whether retail service was delivered with fibre-optic technology or through an xDSL connection on the copper network. The retail price of Internet connections appeared thus to always be the same regardless of the technology of the access system, or local loop, in this specific context.

In the opinion of the CA the above issues supported the preliminary PTA conclusion in the draft market analysis that Internet connections through the copper network and fibre-optic belong to the same service market pursuant to paragraph 160 in the draft analysis.

The position of the PTA

The above specified CA comments categorically support the PTA conclusion that there is substitutability between copper and fibre-optic networks on the relevant wholesale markets and corresponding retail markets. The CA supports the main conclusions drawn by the PTA from the conditions on the relevant markets and the PTA assessment of substitutability. There is further discussion on substitutability and delineation of service markets in Sections 3 and 4 here below, in the same Sections of the updated preliminary draft (Appendix A), as well as in Chapters 2 and 3 in Appendix C, which covers the additional consultation held by the PTA.

GR considers that the market has to be examined as a whole, with respect to substitute products, both in the wholesale markets and related retail markets. Substitutability between fibre-optic and copper connections exists as before, and the chain of substitution has not been broken with respect to the fixed line connections in question. One can see, among other things from the GR utilisation ratio, where the company is the only one with fibre-optic, and there

the company's share is far from being 100%, as service through copper is also being offered in the areas in question, see Seltjarnarnes as an example.

GR agrees with the PTA that Internet connections provided over fibre-optic and those over copper are on the same market. Though the technical solutions may differ, this makes no difference to consumers with respect to the content and intake of service that is provided over these varying technical systems, it is the same. In this way both fibre-optic and copper are still providing service that gives the user an Internet connection of such quality that there is a substitution chain between them.

This can well be seen in the areas where GR has fibre-optic and Míla does not. Even if fibre-optic was only available from GR, a large proportion of consumers would nevertheless choose service over copper local loops, both through Siminn and also through other electronic communications companies on the retail market.

Today there was no such fundamental difference in service over copper or fibre-optic networks that should mean that these technical solutions implied separate markets. This was the same conclusion that almost all regulatory authorities in Europe had reached. There were no such circumstances in Iceland, in the opinion of GR, that would lead to another conclusion, and this could be clearly seen by the fact that parties to the market, place no emphasis on the technology that was used for providing Internet and electronic communications service, but rather emphasised the content, data volume and subscription price.

Broadband connections over copper with xDSL and fibre-optic connections were therefore substitute products for users on retail markets.

The position of the PTA

The above specified comments from GR support the PTA conclusion on assessment of substitutability and definition of service markets. It is particularly worth having in mind that where GR operates the only fibre-optic network, such as in Seltjarnarnes, there is still a proportion of consumers that choose to purchase service through copper local loop. Despite the fact that it is more than 10 years since GR completed deployment of fibre-optic in Seltjarnarnes and that Míla had commenced fibre-optic rollout to a considerable degree, there were still about [...]% internet connections over copper there at the end of 2020. There is further discussion on substitutability and delineation of service markets in Sections 3 and 4 here below, in the same sections of the updated preliminary draft (Appendix A), as well as in Chapters 2 and 3 in Appendix C, which covers the additional consultation held by the PTA.

Tengir says that it agrees in general and endorses the conclusions reached by the PTA in its preliminary draft, subsequent to detailed market analysis, and says it sees no reason to contradict them. This applied among other things to definitions of the wholesale markets in question, which were both markets on which Tengir traded.

The position of the PTA

The Tengir comment supports the PTA definition of the service markets in question.

Míla points out that the PTA point of departure for definition of the relevant markets is the definition shown in the ESA Recommendation. There it was correctly indicated, according to guidelines from the EU Commission on market analysis and assessment of significant market power, that the point of departure for all analyses should be an assessment of the retail markets in question, with respect to demand-side substitutability and as appropriate supply side substitutability, from the point of view of end users and having taken into account a forward-looking view of market developments. Míla referred, among other things to items 12-15 in the ESA Recommendation from 2016 on the appropriate product and service markets.

Whether competition was considered to be sufficiently effective on the retail market, taking into account a forward-looking perspective, and without obligations, decided whether it was necessary to assess the wholesale market, and then with a view to potential obligations. As is stated in the Recommendation, the objective of such obligations was to produce benefits for end-users by making retail markets effectively competitive on a sustainable basis, see item 7 in the Recommendation. At the same time, it was expected that such obligations were only imposed on markets where effective competition could not be found, i.e., in markets where there were one or more undertakings designated as having SMP and where national competition law remedies alone are not sufficient to address the competition problem identified, see item 11 in the Recommendation.

Despite the fact that in the ESA Recommendation as in other guidelines referred to as appropriate by the PTA in the preliminary assessment, including foreign precedent, one could find specific indications that could be taken into account in market analysis, the above specified documentation did not change the fact that the national regulatory authority should in each instance make an independent assessment of the retail and wholesale market in the state in question, keeping in mind the conditions found in that country, such as with respect to behaviour of end users and electronic communications companies, substitutability and other factors, as it was perfectly clear that the NRA in question did not have the grounds to enable it to take a position on whether conditions were "comparable to those that generally pertained within the EEA or not", without having made *such an independent investigation* of market conditions in the country in question.

It was Mila's opinion that the PTA had in the available preliminary evaluation *not fulfilled* its duty to investigate, pursuant to article 10 of the Administrative Procedures Act, see also ESA Recommendation and guidelines from the Commission, among other things in the evaluation of special conditions on the Icelandic market and limited substitutability between differing access options. The preliminary evaluation in this respect, and the subsequent discussion on the necessity to impose obligations, was therefore characterised by significant weaknesses that the PTA had to correct and/or in all events prepare a more detailed investigation.

The position of the PTA

The PTA considers that the preliminary draft is based on an adequate PTA investigation. The PTA conducted a detailed examination of conditions in this country and requested substantial information from parties to the market, with a breakdown by municipality. The PTA investigation when making this analysis is not inferior to the investigations made by the Administration in prior analyses, which have received endorsement from the EFTA Surveillance Authority and on occasions from the Appellate Committee for Electronic

Communications and Postal Affairs. In reality, this is the most detailed analysis that the PTA has ever performed. The PTA has however reacted to criticism from Míla and Siminn and has gathered even more data. In addition to this, the PTA has commissioned a consumer survey which among other things cast light on the factors that decide consumer choice of Internet service provider and the willingness of consumers to switch between varying access networks and is useful for substitutability assessment between copper and fiber connections. Questionnaires have been sent to parties to the market to gather further information on a number of issues. The PTA investigation is described in more detail in the updated preliminary draft (Appendix A) and in the appropriate Sections here below.

3 Competition circumstances on retail markets for access provided at a fixed location and broadband service

3.1 General

3.1.1 Access, distribution, number of customers and line charge

The Competition Authority (the CA) considers there to be indications that competition was significantly limited in retail for local loop access when one considered the fact that there had been little or no price competition in line or access charges in recent years.

The position of the PTA

The PTA agrees that indications can be observed of limited competition in this area. Line charge is an additional charge which is advertised nowhere as a specific product. An increase of this charge may be considered in some respects barely visible to consumers, and the electronic communications companies appear to follow each other's increases. At the beginning of 2021, however, Síminn began advertising Internet services individually and in packages with the line charge in question included in the total price. In Síminn's invoice, however, the line charge is still a separate item.

Nova refers to paragraphs 33-36 where it is among other things stated that the purchase of dedicated Internet service entailed additional costs in the form of line charge/access charge which were collected at retail level. Nova considered there to be a lack of transparency when one took into account that Internet service was a "basic service" that always had to be paid for when an access connection was used, and that seems to be the way things were structured with Míla/Siminn. It was shown for example in instances reported by the CA in Decision no. 25/2020, that the customer always paid for Internet service if he was using an access connection. It would for example be possible to only have IPTV service (no Internet) and nevertheless have to pay for the basic Internet service in question. None of the services should belong to access connections, for the sake of transparency and clearer comparison.

The position of the PTA

The PTA agrees that one can consider there to be a lack of transparency in respect to line charges. With regards the Míla bitstream tariff, the company structures it such that IPTV and VoIP streams are additions to the Internet stream. A service provider of IPTV and VoIP can therefore not sell a consumer service unless Internet transit is also purchased. As Nova points out, the service provider must pay for wholesale transit of the Internet, which is not used to gain access to IPTV transit for a household that only purchases TV service and not Internet. This cost must therefore be recouped from the user.

Míla points out with respect to the list of urban kernels with fibre-optic in paragraph 27, that VDSL is also offered at those locations.

The position of the PTA

This is correct and it is nowhere stated that these locations do not have access to VDSL.

Míla points out that according to figure 3.3 in paragraph 35, Siminn appears in the last 3-4 years, not to have been an innovator in price changes of line charge. One could not see information about this further back in time as such data for Vodafone was lacking in the figure. Comparison between list price for local loops at Míla and GR was a very dubious comparison. Míla gives no discount from these charges to customers that are electronic communications companies at retail level. On the other hand, GR has for some time charged end users directly, but has now changed direction and charges the service providers for the local loop. Míla is quite sure that large service providers enjoy discounts after they began to collect charges for local loops. One could consider it likely that with changes to the manner of charging, GR increased its prices generously in order to create leeway for discount terms to service providers, so that they could avoid loss of revenue resulting from the changes.

The position of the PTA

It is true that comparison between retail and wholesale prices does not always tell the whole story, because the retailer adds some value to the product. The conjecture on list price and discount terms will not be concurred with, but one can also consider it likely that experienced companies will carefully examine the real cost of procurements for their operations and will not allow high list prices and large discounts to distort their decision-making. One can however point out that when an electronic communications companies collects access charges from consumers instead of GR, it is clear that the cost of collection is transferred from GR to the electronic communications companies. The PTA therefore cannot see that it is abnormal if electronic communications companies pay a lower charge for each local loop than when it is collected directly from each consumer.

3.1.2 Supply, price and market share on the retail market

Nova referred to paragraph 38 where it is among other things stated that Siminn was the largest company on the Internet service market. Nova noted that at the same time as Siminn was growing, a very significant transfer/transformation in technology was taking place, i.e., from older connections to Míla fibre-optic which one must consider to be an even greater strength of the service and to be such that it further dynamized the advances of Míla and Siminn on retail markets.

The position of the PTA

Here Nova indicates a point that the PTA made in paragraph 59 in the Preliminary Draft, see figure 3.11, which is the number of customers with fibre-optic connections in recent years. There it states that Siminn appears to be the company with the fastest growth in that sector of the market that is growing most.

Since the Preliminary Draft in question was open for consultation on 30 April 2020, Siminn has made an agreement with GR on bitstream access to the GR fibre-optic network. Siminn service on the GR network commenced in late august of 2021. One can expect that with this,

Siminn will, all things being equal, increase its market share even further. It was over 46% at the end of 2020 and it is not unlikely that it will exceed 50% during the lifetime of the analysis.

In the same way, it is likely that a significant proportion of Siminn customers that will be on the GR network will come from the Míla network, and it is furthermore clear that Siminn will probably also seek customers that are already on the GR network with other service providers. The PTA does however not expect any other outcome than that the Míla market share on relevant wholesale markets will continue to be over 50% up to the end of the lifetime of the analysis. In addition to this, various other developments could strengthen Míla market share during the lifetime of the analysis, and it is not inconceivable that companies like Vodafone and Hringdu, and even Nova, would move their custom partly or totally to Míla, or place more emphasis on new customers going to the Míla network instead of GR network, as the companies' business is not tied to GR. The service providers in question do business today both with GR and Míla, though the majority of their transactions are through the GR network.

Míla points out, with reference to paragraph 40, that Nova had grown quickly since 2016 and one could assume that the company's market share was about 12-15%. [...] Míla also pointed out that this growth seemed to be mostly at the expense of Vodafone.

The position of the PTA

Nova had achieved 14.7% market share by the end of 2020, which means that the company's share had grown rapidly since 2016, when the company began to offer Internet service through fixed line network. From the end of 2017 the Vodafone market share has dropped from 36.8% to 27.7% by the end of 2020. During this period the Siminn market share has however increased from 45.9% to 46.3%. Hringdu share has grown slightly from 7.3% to 8.6% during this period. It is therefore clear that Nova has first and foremost been taking business from Vodafone. The PTA does not expect Nova growth on this market to be significant during the lifetime of the analysis. The company's market share could even decrease during the lifetime of the analysis if Siminn takes a significant amount from the company when Siminn begins to offer service on the GR network.

It is correct when Míla states that Nova has first and foremost purchased wholesale products from GR, although the company only purchases about [...]% of its connections from Míla. GR has no guarantee that Nova will not increase its business with the Míla network at the cost of the GR network during the lifetime of the analysis, any more than applies to Vodafone and Hringdu, who today also both operate on the GR and Míla networks.

The PTA points out that the share of "others", i.e., Internet service providers that do not achieve 5% share has dropped by almost half since 2017 and was 2.8% in total by the end of 2020. The Internet service market appears therefore to be converging into competition between four parties where two are conspicuously largest, Siminn however much larger than Vodafone, and Siminn has been growing, or at least held its own, while the other, Vodafone, has decreased significantly in recent years.

Míla refers to paragraph 49 and points out that in the Nova offer, no distinction is made between whether a connection is through fibre-optic or 4.5 G. Also, that only fibre-optic from GR is available.

The position of the PTA

It is true that in its marketing to consumers, Nova has chosen to offer connections through the GR network. Nova corporate service, which originated with the Nova purchase of Símafélagið, offers connections through the Míla network, among others, and today about [...]% of Nova connections are on the Míla network. GR has no guarantee that the company will not transfer increasingly from the GR network to the Míla network during the lifetime of the analysis. On substitutability, reference is made to the answers in Section 4.2.3.

Nova refers to paragraph 59, which deals with Nova growth in fibre-optic connections. Nova states that it commenced operations on the fibre-optic market in April 2016. Siminn had quickly reacted to this competition with marketing new offers, particularly in the form of bundles and free offers, which Nova maintains do not stand up to scrutiny, both in the light of the CA Decision no. 25/2020 and of article 11 of the Competition Act. The Siminn emphasis on such offers has subsequently increased significantly and now covers all service areas where Siminn and Nova competed.

The position of the PTA

Competition in the consumer market seems to have revolved first and foremost around bundles in recent years. This is also clearly shown in the PTA consumer survey from October 2020 where it came to light that 71% of households that have Internet service, purchase it as part of a bundle. Bundles are also high on the list of the issues that are important to those that have switched service provider during the 12 months prior to the survey being conducted. This appears particularly to apply to those that do business with Siminn, as 31% of these respondents mentioned bundles as the reason for switching, while price was the primary reason for switching to Vodafone, Hringdu and Nova.

It is clear that Síminn's Heimilispakki (Home Package), which includes both electronic communications service and TV content, in addition to preferential terms regarding the amount of data for those family members who have mobile phone services with Siminn, has achieved great popularity on the market. It strengthens the Síminn's position on the retail market and that of Míla on the wholesale market, as the Siminn service has for example not been on offer on the GR network until now. With an agreement between Siminn and GR from July 2020, this changed in late august of 2021 when Siminn begun to offer its service on the GR network It is however not expected that a large proportion of Siminn customers will be on the GR network at the end of the lifetime of this analysis. According to the agreement, it is expected that the proportion will be [...]% at the end of the lifetime of the analysis, but it is clear that a significant proportion of these customers will be customers that were already on the GR network and that therefore they have not moved from the Míla network.

It is then in the hands of the CA to investigate cases that relate to possible Siminn abuse of the company's potential market dominance on retail markets. The above specified CA Decision no. 25/2019 related to a breach of the Settlement between the CA and the Siminn Group and was partially confirmed by the ruling of the Competition Appeals Committee no. 1/2020, dated January 13, 2021.

Siminn said that development and Internet service in recent years was such that it was hardly possible to maintain that effective competition did not pertain. Prices had dropped, and quality had increased according to Statistics Iceland sources. It was not possible to dispute these facts.

According to measurements by Statistics Iceland, the consumer price index increased by 14.5% from the beginning of 2015, while the index for Internet service had dropped by about 30%. One could hardly say that this was an indication of shortage of competition in retail.

Next, one could consider quality of the service, and the best measure of this was speed of connections. Other information on quality of connections was not available. In 2015, fibre-optic connections were 27.5% of connections and this proportion has now risen to 62.8% in 2019. With respect to distribution of fibre-optic connections, it was perfectly clear that today over 80% of homes had access to fibre-optic local loops.

In news from the PTA dated 6 July 2020, it was stated that the Administration would continue to protect healthy competition on the electronic communications market, and the price of electronic communications service in Iceland was among the lowest known.

It was clear that in this case the PTA discussion in the market analysis did not match the actual reality. The PTA admitted that the price for electronic communications service in Iceland was among the lowest known. This meant that Siminn, naturally had difficulty in understanding the assertions by the PTA that there was no effective competition on the electronic communications markets. The PTA was thus contradicting itself.

Something else that actually appeared in the PTA market analysis was that distribution of fibre-optic was also among the best-known. This should be an indication of active competition.

The situation is such that in Iceland, consumers received the best-known quality at the lowest known price. How it could be that competition was not effective was simply a mystery to Siminn, as it was clear that the PTA asserted this against its better judgement.

In this way, it was proven that the PTA market analysis did not reflect reality. Simply for this reason, the PTA should retract its analysis and start again from scratch. An investigation of competition on the market needed to be conducted, which had not been done. The price for Internet service in this country had been on a steady decline since 2015. Siminn also indicated that the PTA should check prices in the Nordic countries, which gave strong indications that pricing on the market was significantly lower in this country.

The PTA had thus proven that there was effective competition on markets for electronic communications service, though the Administration now wished to assert something else for the purpose of continuing its projects, to micromanage the market with its bias and to impose increased obligations on the Siminn Group. Then one could point to the entry of Nova in the Capital City Area, as in a few years the company has achieved 20% market share, which has returned ISK 2.5 billion in business. This fact was not an indication of major access barriers, quite the contrary. The company could also easily increase the number of connections by offering Internet service across the whole country but chose for some reason not to do so. Nova was the company that had gained most customers in 2019. This means it was not possible to maintain that access barriers were high.

With respect to further discussion on small access barriers, one could point out that Vodafone had in its merger records for the purchase of the operations of 365 Miðlar ehf. (see the CA Decision no. 42/2017, paragraph 399) said that "access barriers on the electronic communications market were small and particularly because of changed and increased service from the wholesalers Mila and GR". One had to take into account that this was a declaration from Vodafone to the Competition Authority and therefore clear that it was not incorrect, unless the PTA succeeded in proving otherwise with data that has not previously seen the light of day.

When analysing whether competition was efficient, it was normal to take into account parameters resulting from competition, such as lower price, increased quality of service and innovation. The PTA not had not considered any of these parameters. The PTA analysis was thus contrary to article 10 of the Administrative Procedures Act. The PTA, for this reason, could not use it as grounds and Siminn challenged the PTA to review its position and to retract its document, taking into account the fact that the price of electronic communications service was among the best known and the quality also.

The position of the PTA

The PTA notes that the Administration has conducted a detailed analysis of competitive conditions in this country on the relevant wholesale markets, see Sections 8 and 9 and related retail market in Section 3, in the revised analysis (Appendix A) and it was the conclusion that Míla has SMP on the relevant wholesale markets and that there was not efficient competition on the related retail market. This means that there cannot be effective competition on the relevant markets. Reference is furthermore made to previous answers in this Section and to Sections 8 and 9 in this document with respect to PTA answers to a large number of comments from the Siminn Group, that relate to this assessment.

The price for Internet connections and the quality cannot on their own cast light on the competitive position, nor the distribution of fibre-optic networks. It is conceivable that an electronic communications company could be in a monopolist position or almost that, and prices could still be advantageous, of high quality and fibre-optic distribution extensive. It is clear that in such an example, effective competition cannot pertain. The PTA however agrees with Siminn that low prices, high quality and extensive fibre-optic distribution can give indications of competition, and even effective competition. It is appropriate to point out that Siminn is describing conditions on the retail market where the underlying wholesale markets are subject to a range of obligations. The PTA is obliged to consider how the situation would be if obligations were not in place on the relevant wholesale markets. As explained above, the detailed PTA analysis did not reveal that effective competition pertained on the wholesale markets in this country, nor on a related retail market. The PTA furthermore totally rejects not having taken these issues into account in its analysis.

The PTA furthermore points out that a drop in price for electronic communications service is part of international development which has been taking place during the past years and is therefore not unique for Iceland. The same can be said about increased quality and distribution of high-speed networks. The PTA also rejects that there is some discrepancy between the market analysis in question and PTA discussion in other fora, or that the market analysis does not reflect the real competitive conditions in this country. The PTA furthermore totally rejects

not having investigated the case adequately, and the PTA has replied in detail to comparable comments from the Siminn Group elsewhere in this document.

The PTA therefore cannot agree that distribution, quality, and price alone are measures of the status of competition on an electronic communications market. In this connection, one can point out, though not relevant to this analysis, that in the years before the lifting of monopoly, quarterly reports by Telegen showed that Póstur og sími prices for voice telephony to homes were among the lowest in the OECD, having taken into account purchasing power and distribution of the copper line system to virtually all homes in the country.

ITU price comparison, which the PTA has used in recent years, has not shown that the retail price of Internet service is particularly low in this country, though baskets of various electronic communications services for homes and companies have compared well in international comparison.

One can for example mention that in 2016, Iceland was in 22nd place in Europe for purchasing power (PPP\$), with tax included, for 1 Gb/s Internet service of 44 states - where all of Europe was taken into account, not only the EEA. In 2017, Iceland was in 16th place, 15 in 2018 and from that time the reference is for 5 GB data volume, and then in 41st place in 2019, which is the year when ITU began to take line charge into account as part of Internet service, as it is necessary to pay the charge to be able to have access to Internet service. After that, Iceland is the most expensive country in Europe for 5 GB Internet service.



Source: https://www.itu.int/net4/itu-d/ipb/

Then Siminn points out that Nova success indicates that there are not significant access barriers in place and that Vodafone has also confirmed this in the run-up to the company's merger with 365 in 2017. The PTA refers to other answers in this document with respect to the Nova success and reminds that it was not at Siminn's cost, which has retained a strong position despite the Nova success in question. Nova has first and foremost, cut into Vodafone market share in recent years. The Vodafone comments in question in the run-up to the merger in question cannot however, on their own decide on whether there is effective competition on the wholesale markets in question, nor on the retail market. In that instance, Vodafone was protecting its interests vis-à-vis the CA, and trying to get endorsement for the merger in question. One must view the comments in this light. It is also necessary to note that all of the competitors of the

Siminn Group that submitted comments in the consultation to the preliminary draft to this market analysis, consider that there are still significant entry barriers on the wholesale markets in question in this country and that there is not effective competition on them, among others Nova and Vodafone. The same can be said about the CA.

Siminn said that it was the assessment of the EU Commission that a position of market dominance was unlikely when market share was under 40%. In the PTA analysis it states that Siminn had *less than 40% market share* in the Capital City Area. This means that the Siminn status in that area is unlikely to be defined as having market dominance.

In further support of this contention is the fact that Siminn market share has been under 40% in the relevant area for a number of years and there was no likelihood that this situation would change. Assertions that the Siminn position would strengthen as a result of the English Premier league were groundless. Siminn pointed out that when one considered the Capital City Area, Ölfus and Hveragerði, with the addition of Akranes, the number of customers using Siminn Internet service in these municipalities had dropped by about [...], and when one also took into account the increase in population in the area during the last 4 years, it was clear that the Siminn share in that area was on the decline, and not increasing as maintained by the PTA. In any event, there were no indications that Siminn was strengthening its position in the area, and certainly not significantly strengthening as was maintained.

Almost one whole season of three seasons of the rights to show English Premier league matches was completed, so if the English Premier league had had any impact, then this impact should have manifested itself in full. The fact of the matter was that the transmissions from the Premier league had had almost no impact on competition for Internet service, as maintained by the PTA.

The PTA maintained that Siminn, from the end of 2018 and into mid-2019, had been increasing its market share in the GR operating territory, which was defined too broadly as the PTA included apartments where GR did not have any operations, such as in the rural areas of Rangárþing, both the Ytra and Eystra municipalities, and included Reykjanesbær in the picture where GR operational territory only reached about 10-15% of homes in the municipality. The PTA thus appeared to deliberately include 7000 households in the GR territory, where the PTA knew that GR did not have operations and the PTA naturally knew that this distorted the real picture of the state of the market. Siminn actually casts doubt on individual numerical assertions made by the PTA, as the number of Siminn customers in these areas has not increased as stated by the PTA. The PTA furthermore seems to include in the totals, connections that are not Internet service, but rather data transfer connections, which were a hardly measurable proportion of the market and which were on the decrease. In the light of the fact that the market was Internet service, then such service would not be a part of that.

Given the estimated number of inhabitants in Hella and Hvolsvöllur, the Siminn share would be about [...]% and the Vodafone share similar to that, even a little more as other companies had limited market operations outside the Capital City Area.

The position of the PTA

The PTA notes that it is the Administration's conclusion that the Capital City Area or the GR operating territory are not a separate geographic market, but rather that market conditions and competition across the whole country are so homogeneous that one must consider the whole country as a geographic market. One can nevertheless find varying conditions, but they are not sufficiently different to justify geographic segmentation of the market. In order to take such conditions into account, the PTA has defined criteria and withdraws obligations from Mila where those criteria are met, which is the case in 17 of 69 municipalities, which accounts for about 70% of the country's population. The Siminn retail share is one of these criteria and therefore the points discussed here by Siminn are taken into account. Subsequent to the additional consultation that was opened on 30 October 2020, the PTA decided to increase the criterion for Siminn retail share from 40% to 50% and do not take into account a specific Mila market share at the wholesale level.

The PTA chose municipalities as an area to be examined with respect to differing geographic conditions after a detailed study of conditions by postcode and municipality. Neither municipalities nor postcodes were homogeneous and fibre-optic rollout is first and foremost implemented at the municipality level. Reference is made to Section 6.4 and 7.4 in updated preliminary draft (Appendix A), to Sections 6 and 7 here below and to Appendix C with respect to further discussion on this subject.

With respect to geographic analysis, the PTA refers in other respects to Sections 5-7 in this document and to the same sections in Appendix A, and to Appendix C, where the PTA replies to comments received in the additional consultation which was opened last 30 October.

Market share statistics that were published in the preliminary draft are from mid-2019, the figures for the end of year 2019 were not available prior to the publication of the preliminary draft. At that time the English Premier league season had not started, so one cannot say that the first season had almost been completed. The PTA will update the statistics to end of year 2020.

Siminn is correct in saying that Siminn market share in the Capital City Area is just under 40%, as it was [...]% at the end of 2020, compared to a 46.3% share for that company nationwide at that time. The Siminn market share was [...] in the whole GR operating territory at that time. The above specified agreement between Siminn and GR will, all things being equal, very probably lead to the Siminn market share in the Capital City Area exceeding 40% during the lifetime of the analysis, as Siminn will doubtless encroach on the market shares of Vodafone, Nova and Hringdu, that are already on the GR network. Siminn offers the Home Package mentioned above, which among other things includes popular TV material that should in any event, appeal to consumers that are on the GR network today, just as it does to those that are with Siminn on the Míla network.

The PTA considers there to be no reason to specifically reply to the above comments made by Siminn with respect to Rangárþing eystra and Reykjanesbær, as the PTA considers there to be no justification for segmenting geographic markets, as previously explained. Rangárþing Ytra is, however, one of the 17 municipalities that meet the conditions for lighter obligations.

Siminn said that in the GR operating territory, as defined by the PTA, Vodafone had a market share, up to 35-40%, Nova had 10-15% and Hringdu had 5-10%.

Siminn based this on the GR operating territory being an area where GR had achieved over 50% distribution, according to the OFCOM estimate. Made reference to definition of markets with respect to this issue. In the opinion of Siminn, it was therefore clear that in the GR territory, Siminn had less than 40% market share.

When one considers the actual GR operating territory, it was clear that the Nova share had at the end of year 2019, increased to 15-20% and it the size of the Vodafone market share was not clear but probably about 35%. The Siminn share was less than 40%, which meant that the shares of Siminn and Vodafone were similar, from which one could draw the conclusion that Siminn could not be considered to have a dominant position. The rapid entry of Nova was furthermore proof that there were no barriers to entry.

Siminn had not sold Internet service through the GR system for quite some time. For a long time, Siminn had requested access to the GR state funded local loops, but GR and the PTA had jointly prevented such access. Siminn was now trying to make an agreement for access to GR bitstream and there was a strong likelihood that this would be successful. Siminn had sold its Internet service through the Mila system and through other networks in the countryside. The Siminn increase in fibre-optic connections applied in a vast majority of cases to Siminn customers that had switched from xDSL connections to fibre-optic. Siminn had for example announced an arrangement for sale of the English Premier league in April 2019 and from that time, Siminn customers, with Internet service in the GR territory had increased by [...], from [...] in March 2019 to [...] June 2020. The numbers clearly showed that the PTA assertions that the English Premier league had strengthened the Siminn position in Internet was a fabrication. Though there were some fluctuations between months or periods, it was more reasonable to look at development and the direction in which it was going. According to the Siminn figures, the company's development in the GR territory tended towards a steady decrease. Nova, which only operated in the GR territory, had gained 6500 connections in 2018 and 4000 in 2019. The company had also increased its number of customers by more than 10,000 over a period of two years. Residents in the GR territory during these two years had increased by 4000 which meant that the Siminn share in the area [...]

The Siminn share in the GR operating territory had been on a steady decline, though fluctuations between months had occurred in both directions. Siminn had slightly increased its number of customers in the autumn of 2019. This could be true attributed to the fact that Siminn had begun offering fibre-optic service to households, which Siminn had previously not done. There had also been an increase in the autumn of 2018 for the same reasons. What had however happened after the turn of the year 2018/2019 and after the turn of the year 2019/2020, was that the number of Siminn connections had decreased in both cases. Siminn customers in the area had [...] during the last 6 months of 2019 by [...] while from the turn of the year 2019/2020 (6 months) [...]. It was therefore clear that despite Míla fibre-optic rollout and despite the fact that Siminn had acquired broadcasting rights for the English Premier league, [...] This showed that the Siminn offer of fibre-optic through Míla systems and the Siminn offer of broadcasts of the English Premier league had not led to a strengthening of Siminn's position in the GR operational territory and thus that there seemed to be no

likelihood of Siminn exceeding 40% market share in the GR operating territory during the lifetime of the PTA analysis.

The position of the PTA

In part, the PTA refers to the previous answer here above, among other things with respect to Siminn discussion on the company's market share in the Capital City Area and in the whole of the GR operating territory.

As the PTA has previously explained, Nova gains in recent years have first and foremost been at Vodafone's cost. Siminn has held its market share quite well in recent years, at the same time as the market has grown. In this manner, Siminn sold units increased from 61,328 at the end of 2016 to 65,637 at the end of 2020 at a national level, or about 4,309 connections (7%). Síminn's position had thus not been weakening in any measure in recent years, which one must consider good performance for a company that has just under 50% market share. The PTA considers that the reasons are first and foremost the popularity of the Home Package and popular TV content in that package, such as Siminn TV Premium, where among other things, English football is included.

Siminn refers to the fact that the company market share in the Capital City Area has been in steady decline in recent years. As is stated here in the previous answer above, the company market share was [...]% in that area at the end of 2020. At the end of 2018, Siminn market share was [...]% in that area and [...]% at the end of 2017. The PTA does not have older information available on market share by municipality. Given the development during this 3 year, the PTA cannot see that major changes are taking place in Síminn's share in the capital area, but it has decreased by 3.5 percentage points since the end of 2017. The PTA considers that the agreement between Síminn and GR will, other things being equal, lead to Síminn's market share increasing the capital area, as well as in the entire GR area of operation, during the lifetime of the analysis and even exceed 50% nationally.

The PTA discussion on market share in the operating territory of Mila competitors is indicative of development of the wholesale markets in question. The operating territories are however in a state of constant flux, some districts and municipalities have been fully developed, others are at various stages of development and new ones emerge. In the opinion of the PTA, the operating territories of parties that operate electronic communications infrastructure are not appropriate boundaries for geographic analysis, though a detailed examination of the development of competition could be useful to describe conditions. For discussion on areas for analysis, reference is made to Section 6.3 in the updated preliminary draft (Appendix A) and to the same section here below.

Siminn said that there was no doubt that Siminn could not be considered to have SMP in the GR operating territory. The data that supported this was not disputed:

- a) Siminn has steadily had less than 40% market share in the area and there are no indications that this will change during the lifetime of the PTA analysis, i.e., that the share would increase to more than 40%, and even less likely that the company was heading towards the 50% threshold.
- b) The next competitor, Vodafone, had a comparable share at about 35%.

- c) Few access barriers. Nova had entered the market and achieved significant market share in a short period of time, i.e., growth from 0 up to 20% over a period of 3 years.
- d) The Siminn Group was not an inevitable business partner, i.e., it was not necessary to purchase service from the Siminn Group in order to be able to provide competition in Internet service in the area.

The above specified facts were sufficient to categorically state that Siminn did not have SMP in GR market territory, and thus neither in the Nova market territory. PTA assertions to the contrary were thus both unfounded and wrong.

The position of the PTA

The PTA again points out that the operating territories of Míla competitors, as such, are not in the opinion of the PTA appropriate grounds for geographic segmentation. The PTA considers it more appropriate to use administrative boundaries instead of distribution of electronic communications networks and the PTA considers that municipality boundaries are the most appropriate delineator. The electronic communications networks of GR, Tengir and other parties are of course distributed in specific municipalities. Reference is made to prior answers and to Section 6.3 in the updated preliminary draft (Appendix A) and to the same section here below.

3.1.3 Internet service and Iceland in international context

Mila pointed out, with respect to paragraph 75 in the preliminary draft, that Council Europe FTTH statistics indicate that the use of fibre-optic connections in Iceland is considerably greater than is generally the case in neighbouring countries Míla considers that this indicates that in Iceland, users consider copper connections as inferior service to connections through fibre-optic. Míla therefore considers the PTA to be obliged to analyse Icelandic conditions instead of solely taking into account considerations that apply where other competitive conditions prevail.

The position of the PTA

The PTA agrees that these figures indicate that the use of fibre-optic connections is very high in Iceland in international comparison. The distribution of such networks is also extremely widespread and reaches a significant proportion of the population, which indicates strong willingness to invest. It is clear that in the long term, consumers and electronic communications companies consider that fibre-optic will completely or mostly replace copper networks. It is however still the opinion of the PTA that there is substitutability between such networks today and that there will be during the lifetime of this analysis, as consumers as a whole consider that copper connections adequately meet the needs of households, see PTA consumer survey. It is however likely that at some point in time, such substitutability will no longer be in place, first and foremost because the aim is to cease operation of the copper system in the future. This will however not happen during the lifetime of this analysis in the opinion of the PTA.

The PTA points out that at the end of 2020 there were still about 58 thousand copper connections in use in this country. The fact that the Siminn product offer on the Internet market still relied to this extent on copper local loops and that Siminn can sell fixed line connections at the same price and quality across the whole country, regardless of whether the local loops are copper or fibre-optic, shows without any shadow of a doubt that there is significant substitutability. The development from copper local loops to fibre-optic local loops is normal development over to new and more economic technology and does not exclude substitutability at the same time.

The PTA will further discuss such substitutability later in this Section, and in Section 4, and also in the same sections in the updated preliminary draft (Appendix A) and in Appendix C, where the PTA will answer comments submitted in the special additional consultation where this issue was discussed, among other things.

Míla refers to paragraph 76 of the preliminary draft and to the PTA opinion that there may be less need for lifting obligations for the purpose of encouraging new investment. Míla considers this opinion to be wrong. As an example, one could cite the call for tenders in Vopnafjörður in the spring of 2020, which among other things had included development in an urban area, where no one submitted a bid.

The position of the PTA

In the referenced paragraph 76, the PTA said that it seemed that market conditions had supported the development of NGA networks, and there had been considerable investment, both in development of VDSL and fibre-optic. Furthermore, that it also seemed that years of investments by parties like GR and Tengir in fibre-optic networks had had the effect that Míla had now recently been implementing major fibre-optic development to the home. In the context of the above, the PTA wording was that in this country there might therefore be less need for lifting obligations on NGA networks for the purpose of encouraging new investment than there was widely elsewhere.

Though the PTA considered that there might be less need to elaborate obligations such that they encouraged investment than there had been in 2014 when the analysis in force was made, the PTA considers that this is nevertheless a factor that must be considered when elaborating obligations. In the year 2014, Míla had commenced its fibre-optic rollout, which now reaches about 77 thousand spaces. Then parties like a GR and Tengir had continued their rollout and local companies such as Snerpa in the West Fjords and Austurljós in East Iceland had commenced deployment. In addition to this, 6000 spaces had been connected in the country's most sparsely populated areas through the project Iceland Digital Connected.

Subsequent to consultation on the preliminary analysis and additional consultation, the PTA withdrew the prescribing of cost analysed prices for Míla fibre-optic and instead planned to prescribe that the Síminn Group will pass an Economic Replicability Test (ERT). This is a lighter and more flexible obligation than the above specified obligation. Among the things taken into consideration with this change were views on distribution of fibre-optic networks in the countryside. With respect to this issue, reference is made to discussion in Sections 10 and 11 in the preliminary draft (Appendix A), same sections in this document and Appendix

C, which contain PTA answers to comments submitted in the above specified additional consultation.

The PTA considers that significant conclusions cannot be drawn from individual projects or calls for tender. One has to look further into the future when general willingness of parties to invest in deployment of fibre-optic networks is assessed. Nor could the PTA see that Míla had shown any interest in the project in Vopnafjörður, despite that there were no price control obligations then in force on the company.

Míla refers to paragraph 77 in the preliminary draft and considers that it is a wrong approach by the PTA to consider that development of fibre-optic systems during the past years indicate less need for incentives for development. Also, the fact that Míla needed to answer competition from GR and from other fibre-optic companies by developing its own fibre-optic despite having a very good VDSL2 system, shows that the public and service providers do not consider VDSL2 to be a real substitute for 1 Gb/s. Furthermore, the fact that there is competition on about 80% of the market should lead to the lifting of obligations on the market rather than there being reason to tighten them. As of today, Míla has deployed fibre-optic to about 30-35% (about 25,000 of about 88,000) access addresses in the country and this on its own should show that now is the wrong time to diminish incentives to development. It is finally appropriate to point out that the "difficult" areas remain where there is only an average of 1.1 homes at each address. There is therefore little incentive to deploy fibre-optic to these addresses because of the costs and even less if single price is imposed. If the PTA imposes the planned obligations on Míla, then the state will need to support development of the remaining areas to a much greater degree than has been the case up to this point in time.

The position of the PTA

The PTA has previously replied to Míla's comments with respect to incentives for fibre-optic development and to the elaboration of relevant obligations here above, and reference is made to that discussion.

It is interesting that Míla should say that it has such a good VDSL2 system. The PTA considers that this strengthens the conclusion that there is still substitutability between copper and fibre-optic networks. The PTA considers that various factors such as statistics on share of copper connections in use in areas where fibre-optic has been deployed, and the conclusions of consumer surveys, indicate that the Míla assertions about lack of substitutability between VDSL2 and fibre-optic local loops are exaggerated.

In its comments, Míla widely refers to conditions in this country and in Sweden as being comparable with respect to the substitutability assessment in question. No country in Europe has a market analysis in force where the conclusion is reached that the substitutability in question is not present. Míla is however correct in saying that in 2019 the PTS in Sweden came to the conclusion in its preliminary assessment that such substitutability was no longer present in that country. The analysis was subsequently stopped by the EU Commission because of an unrelated issue, but that does not change the fact that the PTS has not made such a decision formally and it is not established when such a decision could be made, but that will not be until after national consultation on a revised analysis and after consultation with the EU Commission. Such a process could of course take many months or even quarters.

As the PTA will further discuss here, conditions in this country and in Sweden are precisely not comparable, among other things as VDSL systems have very little distribution in Sweden. For this reason, assessment of substitutability in that country has first and foremost been directed at whether there is substitutability between ADSL networks on the one hand and fibre-optic networks and cable systems (DOCSIS 3.0) on the other. There is however in this country, a very good VDSL2 system, as pointed out by Míla.

Míla states that it has only deployed fibre-optic to about 30-35% addresses in the country, or about 25,000 addresses of 88,000. It appears to the PTA that these numbers contradict other information from Míla. In a Míla reply, dated 1 October 2020, to a PTA query, dated last 24 September, it was stated that the company would have fibre-optic connections to [...] spaces at the end of 2020 just in the Capital City Area, of spaces that the company considers to total 108,000. This gives [...]% distribution in the Capital City Area. In the same reply, Míla allows for this number having reached [...] spaces at a national level at the end of 2020. Despite these high figures on the roll-out of the Mila fiber-optic network, the PTA refers to the number 77,000 in this analysis, which is the figure that Mila gives in the PTA geographical database (GAF). In the opinion of the PTA, however, it is clear that there is some miscounting at Míla's side, but the company has acknowledged that there is considerable error in those figures. It is therefore clear that the company's fibre-optic distribution is much more widely deployed than it maintains in the above specified comments. Given information from Míla, the deployment will continue to be strong throughout the lifetime of the analysis, while the deployment plans of competitors are much more moderate.

The PTA has reacted to comments on single price for fibre-optic and subsequent to the additional consultation has changed from imposing price control obligations on Míla to introducing an ERT obligation on Síminn Group.

Nova refers to paragraph 77 where it states among other things that TV distribution through IPTV systems is considerable in Iceland compared to other countries. Nova considers it clear that Siminn has a considerable advantage over competitors in TV service over an IP network, used for providing TV content to households in Iceland, and already had most set-top boxes in the country's homes. One could roughly estimate that given the Siminn tariff and the PTA statistics, Siminn revenue was about ISK 1,500,000,000 annually for distribution of open linear material through its closed fixed line network to customers, and that is without taking into account revenue for access charges to Míla. If one considered the existing Siminn definition of basic service, "Sjónvarp Símans", one could easily assert that Siminn was the largest distributor of linear TV content in Iceland, from which it generated significant revenue.

The position of the PTA

The PTA does not take a material position on these comments but draws attention to the fact that the Administration has considered IPTV systems to be electronic communications networks that distribute content for content providers, see PTA Decision no. 10/2018 (Siminn infringement of the ban provision in Paragraph 5 of Article 45 of the Media Act) on 3 July 2018 or what is called "the TV Case."

With a judgement of the District Court of Reykjavík in case no. E-3251/2018, dated 1 July 2020, Siminn claims for rescinding the above specified decision were rejected, with the exception that the administrative fine imposed by the PTA on Siminn for breach of the above specified provision of the Media Act was reduced from ISK 9,000,000 to ISK 7,000,000. The District Court did however change some of the premises on which the PTA based its decision, among other things with respect to the factor where an IPTV system was deemed by the PTA to be an "electronic communications network" and that its operation constituted electronic communications service, which enabled the TV service. The District Court judgement states the following on this issue:

"Though one may concur that the operation of an IPTV system for the purpose of distributing visual content is strictly speaking deemed to be electronic communications service, it is nevertheless clear that the operation of such a system is an inseparable part of the operations of the content provider that the customer receives access to by purchasing a subscription and connecting to the system. The system in question serves in reality only the purpose of enabling customer access to the content provider. One must furthermore take into account that the electronic communications service provided for the customer with the IPTV system is insignificant when compared with the media service that subscription to or purchase of access to a content provider has as its main objective.

The PTA is not satisfied with this interpretation of the court and has appealed the case to the National Court. One can expect the judgement of the National Court to be pronounced late in 2021. The above specified TV Case will be discussed further in Sections 10.2 and 11.2 here later and in the same sections in the revised preliminary draft (Appendix A).

Nova is correct in saying that Siminn has a significant advantage over Vodafone, which also operates an IPTV system, at the end of 2020 Siminn had 64.5% market share for that service against 35.5% market share for Vodafone. At the end of 2017, Siminn had 56% market share, and Vodafone 44% such that it is clear that the Siminn position has strengthened significantly on this market during recent years.

3.1.4 Demand on the market for Internet service

Nova referred to paragraphs 81-85 where among other things, it was stated that companies in Iceland were mostly small in a European comparison and there was discussion on demand on the market for Internet service here in this country. Nova agreed with the PTA assessment that companies chose connections according to quality rather than type, but on the other hand the price of connections also had a significant impact and was often the deciding factor. This indicated significant substitutability between technical types of connections as quality was generally good on the connections that were on offer, regardless of the technology used, and the price factor therefore important for companies, which was clearly confirmation of substitutability. This particularly applied to small and medium companies in Iceland which formed a large majority.

The position of the PTA

The PTA considers it to be a characteristic of the Internet market in this country and a measure of general high quality of connections, that small and medium companies appeared to make

do with service of a household quality for the company's Internet service. Retailers on the market appear to some degree to find it difficult to demonstrate increased value of more secure performance, faster fault diagnosis and repairs and other such priority corporate services that is in addition to consumer service. In the opinion of the PTA the above Nova comment strengthens the PTA conclusion that there is still substitutability between copper and fibre-optic connections here in this country.

Nova pointed out that the PTA needed to ensure transparency in assessment of numbers, because as is stated in paragraph 85, the statistics on the number of companies doing business with retail Internet service providers were distorted by the fact that it was common that home connections for employees were being paid for. Such connections were in reality consumer service but in the statistics, the connection is recorded as corporate service as the company in question was the payer.

The position of the PTA

The PTA is aware of these limitations in collection of statistics, but as the data is sourced from electronic communications companies, they needed to carefully record information about such connections, be able to separate them and submit separately as household connections, in order to mitigate this fault. The PTA has up to this point in time, considered this to be an unfair burden for this collection of statistics. In a consumer survey that the PTA commissioned in the autumn of 2020 revealed that this proportion was almost 20%. The main issue is that the PTA considers that both household connections and connections to those companies that make do with household connections, belong to the relevant wholesale markets. The statistics are therefore correct in the context of the whole. Those connections with augmented quality purchased by companies are deemed to belong to Market 4 (formerly Market 6).

Míla refers to Paragraph 85 in the preliminary draft and points out that by far the largest part of what the PTA calls corporate connections belong to that category because companies are paying for employees' home connections. Real company connections, i.e., connections that are specifically designed for company needs are only a fraction of this number, probably about 10-15%. Míla considers therefore that one should only count such connections as "corporate connections".

The position of the PTA

The PTA agrees with Míla that connections with higher quality belong to another market, i.e., Market 4 (previously Market 6).

Míla points out, with regards to paragraph 90 in the preliminary draft that SHDSL and G.SHDSL are two names for the same technology. G.SHDSL is the name for the standard that specifies SHDSL technology. The PTA probably means SDSL and SHDSL.

The position of the PTA

The PTA thanks for this comment and will correct this in the revised analysis (Appendix A).

Míla refers to paragraph 95 in the preliminary draft and considers the PTA position on IPTV over a managed network and OTT IPTV to be interesting. The PTA recognises that users make little distinction between these methods. Why does the PTA consider that Siminn OTT is not then a sufficiently good solution for users on other networks than the Míla networks?

The position of the PTA

The PTA considers it important that Míla has such an unequivocal opinion on one service of its customer and notes that Míla should practice non-discrimination, with all its customers, whether they are part of the Group or external parties. This paragraph discusses in a general manner, visual streaming from the public Internet (OTT) and not specifically about Sjónvarp Símans OTT solution, and no conclusions are drawn on the content and quality of that service compared with that which is provided over a managed virtual network.

Nova furthermore referred to paragraph 93-95 in the preliminary draft, where among other things, there was discussion on IPTV systems and network neutrality rules. Nova pointed out, as is stated in paragraph 94, that IPTV service was offered over a separate virtual network as "specialised service" in the understanding of network neutrality rules. With the advent of more powerful connections (such as fibre-optic) it would hardly be possible to provide them with the authority to distribute TV content through such networks without breaching the non-discrimination rules, that network neutrality constitutes. Nova considered it therefore normal that this service that was now provided through a closed network would increasingly be disseminated through a more open network and expected that the PTA would soon raise objections to the current dissemination.

The position of the PTA

The PTA considers it likely that development will be such that TV service will increasingly be provided through the public Internet but would like to emphasise that the PTA has not yet taken any position or decision on IPTV as a specialised service in the understanding of the network neutrality rules mentioned by Nova.

In February 2021, Síminn announced that later that year the company would offer the content in question without connection to Síminn's set-top box, e.g., through Apple TV. Subscribers to IPTV services peaked in Iceland in mid-2018 but have declined somewhat since then, or from 100,504 in mid-2018 to 88,109 at the end of 2020. This reduction is only at Vodafone, but Vodafone's IPTV subscriptions have decreased from 44,085 to 31,285 during the period, while subscriptions from Siminn have increased from 56,419 to 56,824 during the period in question.

Nova furthermore refers to paragraphs 96 to 101 where there is discussion on company shares in bundles and indicates the very detailed discussion on bundles presented in the Competition Authority Decision no. 25/2020, where the very strong position of the Siminn Group is recounted.

The position of the PTA

As is stated in prior comments and shown in PTA statistics collection, which again is very clearly manifested in the newly conducted consumer survey, competition in retail Internet service is very much based on the offer of product bundles or packaged solutions. The PTA emphasises that the Administration does not regulate retail markets but analyses their status with respect to the underlying wholesale markets.

With the decision of CA no. 25/2020, dated 28 May same year, the Authority came to the conclusion that Síminn had violated three further specified conditions in two settlements that the company had entered into with CA in 2015 when offering the channel Síminn Sport together with the English football through Síminn's bundle Heimilispakki (Home Package). Síminn was to pay a fine of ISK 500 million for the violations. With the ruling of the Competition Appeals Committee no. 1/2020, dated 13 January 2021, the committee confirmed that Siminn had violated Article 3 in Síminn's settlement with CA which was stated in CA's decision no. 20/2015 and Síminn's fine was reduced to ISK 200 million. The provision in question, which Síminn was deemed to have violated according to the settlement, was that Síminn was not permitted to make it a condition for the purchase of electronic communications services provided by the company that any of Skjárinn's services should be included in the purchase. Furthermore, Siminn was not permitted to bundle the sale of the company's electronic communications services and Skjárinn's services against prices or business terms that could be equated to such a condition. Siminn was considered to have violated the second sentence of the provision.

It was therefore confirmed that Siminn had violated the conditions of Article 3 of the settlement in question by selling and marketing the television channel Síminn Sport through the company's Home Package. In the committee's opinion, Síminn used its position to encourage its customers of one division to buy or receive its services in another division, at a price or terms of trade that could be equated with the condition of purchasing the service components together. With this marketing of making the television channel Siminn Sport part of the Home Package through the content provider Sjónvarp Símans Premium, and at the same time raising the price of the Home Package insignificantly, it would be considered that Siminn had specifically sought to get the part of its customers who had already bought telecommunications and TV services through the aforementioned service route to also purchase access to the TV channel in the same manner. In the committee's opinion, Síminn's breach had been serious, but Síminn's conduct had been in conflict with the provisions of the settlement which the company itself had undertaken to honour in its operations. It was important that the conditions of settlements were complied with and that efforts were made to achieve their goals. Síminn could not have been unaware of the fact that the company's sales and marketing of the television channel Síminn Sport could be in conflict with the provisions of the settlement.

3.1.5 Development of offer of various access technologies on the retail market for access at a fixed location

Míla refers to paragraph 118 and points out that networks in the countryside are not based on rings or nets. In many instances the topology of the fibre-optic network is P2P, and use is based on P2MP.

The position of the PTA

The PTA thanks for this comment and will change the paragraph in question in the final edition of the revised analysis (Appendix A) with respect to this.

Míla points out with respect to paragraph 120 that the company does not have active equipment in "Tengir technical facility" but only optical splitters. Active equipment is in Míla telephone exchanges/technical facilities.

The position of the PTA

The PTA will correct the relevant paragraph in the final edition of the revised analysis (Appendix A) and thanks for these comments.

GR would like to mention that in the case of GR connection points, what is said in paragraph 120 is not correct, that connection points in the access layer were large and therefore easy to provide access to local loops. GR connection points today totalled [...] and were often in small spaces that hindered easy access to local loops.

The position of the PTA

The PTA thanks for this comment and will correct the final edition of the revised analysis (Appendix A) with respect to this.

Míla refers to paragraph 121, where there is discussion on wireless access network with fixed usage location (e.g., WiMax), and mentions that today that this is normally done with 4 or 5G technology with an aerial in a window or on the roof, such as e.g., the service of Telenor in Norway, where copper is being decommissioned and such technology being used for home connections.

The position of the PTA

The PTA has acquainted itself with this Telenor service and the nature of disputes that arose with the Telenor decommissioning of its copper system in the relevant areas and the decisions against Telenor made by NKOM and ESA when resolving these disputes. Míla has not adopted such a solution in this country and the PTA is not aware that it is planned.

Míla raises objections to paragraphs 126-129 and considers that here the PTA has ignored the fact that mobile network solutions are today substitute products for fixed line solutions, e.g., in summer cottages, and in the opinion of Míla also to some extent in households. One can expect that this development will increase during the lifetime of the analysis, as e.g., the PTA is active in supporting this development, e.g. with statements at conferences and in the consultation document and ruling on allocation of 5G frequency licences, recently published. In that document, an obligation was specifically imposed on frequency holders to build 5G systems in many urban kernels across the country, where there was a shortage of fibre-optic local loops. It is therefore not possible to say anything other than that the PTA itself appears to see 5G rollout as substitute product for fixed line local loops, though, the Administration

appears to have another view in this market analysis. Míla also refers to news of 5G rollout in the Westman Islands by Nova, https://eyjafrettir.is/2020/05/30/5g-vaeding-i-vestmannaeyjum/ and https://eyjafrettir.is/2020/07/02/vestmannaeyjar-fyrsti-baerinn-til-ad-5g-vaedast-i-heild-sinni/

As is stated in the above specified news, Nova states that with this, the company is offering hugely improved electronic communications services to companies and homes in the Westman Islands with 5G. These Nova plans have had an impact on planned fibre-optic rollout by the local authorities in that municipality.

The position of the PTA

The PTA considers mobile network service to be in addition to consumer solutions for their data transfer needs, and not a substitute. It is still too early to determine what will be the impact of 5G in this context, but the Westman Islands municipality has advertised the local government fibre-optic rollout despite the Nova development described here. Mila has also announced that the company intends to start fibre roll-out in Vestmannaeyjabær in the year 2021. In other respects, reference is made to answers in Section 4.2.3 here below.

3.1.6 Internet service companies' business model

Míla refers to paragraph 134, which discusses lease of infrastructure and states that discussion on Snerpa, which is both a retailer and wholesaler in the Westman Islands, is lacking. According to Míla information, Snerpa is offering, fibre-optic to about 1000 homes in the West Fjords and plans to continue with fibre-optic rollout across all the West Fjords.

The position of the PTA

The PTA will improve the discussion on Snerpa in this paragraph in the final edition of the revised analysis (Appendix A).

3.2 Definition of broadband access (Internet service) at retail level

Siminn pointed out that the market was examined on the basis of retail. The market that was still being examined was Internet service to homes and smaller companies, as appropriate. In order to be able to provide such service, the electronic communications company needed two key components, a connection to the household in question and a connection through Farice. The PTA did not discuss in any way the latter element and its impact on competition, and this is a case of a monopolist company owned by the state and it would have been appropriate to examine the impact of this on the relevant market. Were this not done, the market in question would not be adequately investigated.

The position of the PTA

The PTA points out that the wholesale markets being examined here are local access with fixed connection and central access with fixed connection for mass-market products. Connections through submarine cable are not a defined market, nor a market to be examined

here. The PTA does not consider that Farice should be specifically examined or data transfer through submarine cable when assessing the retail markets in question. It would be the last thing one would expect that the Siminn Group would come off worse in this context, as it is by far the largest electronic communications company in the country and doubtless enjoys no worse terms with Farice than smaller electronic communications companies.

3.2.1 Varying access technology in broadband access (Internet service) at retail level

Siminn says that the PTA defined the market, such that it was Internet service over copper or fibre-optic and excluded Internet service through a cable system, though NRAs in other countries had defined Internet service over cable as part of the same market as Internet service over fibre-optic. This had a particular impact on the Reykjanesbær municipality where there was significant cable system distribution.

Siminn considered it to be a key issue to distinguish between Internet service and connections that were for use in security systems, lift telephone, POS chip card reader etc. It seemed to Siminn that such connections were included in market share statistics, as were local loops that were only used for PSTN, which would clearly be closed in the near future. In this manner, the PTA tried to show a position other than that which was the reality. Local loops or bitstream connections that were not used for Internet service thus did not belong to the market. As an example, there was a large number of local loops, particularly copper local loops, which were not used for Internet service but appeared in the PTA count to be used in market share statistics in the wholesale market. It was important to use connections that were used for Internet service as a basis, and not other connections.

The PTA had furthermore not conducted any investigation as to whether ADSL, VDSL or FTTH products belonged to the same market, but had rather referred only to all the positions taken by foreign NRAs, but this does not replace an investigation of the market in Iceland. The PTA also referred to the fact that ADSL+ and VDSL+ were part of the same market, though they were actually connections that are for the corporate market and not for households. In the same manner it was unclear whether the PTA was including connections to smaller companies offered by GR, as part of the market and, where the real boundary lay between connections that the PTA used as a basis. This was yet another example of lack of investigation which means that the PTA has actually no grounds to assess competitive restraint of the various service items, as the PTA has not investigated the relevant market in Iceland. It was sufficient to indicate the data list in support of this and the fact that the PTA based its position almost exclusively on discussion by foreign parties, that are discussing other markets.

In the opinion of Siminn, the analysis revolves around standard Internet service to homes. The next step was to examine whether varying service types that were on offer, were all part of the same market, i.e., ADSL, VDSL, fibre-optic (FTTH), cable system, 3G, 4G and 5G are all part of the same market. This investigation had not been conducted by the PTA and there was no data on which to base the assertions made by the PTA.

Siminn experience was that consumers did not switch from fibre-optic over to xDSL. Siminn indicated the PTA figures on FTTH connections compared to xDSL connections in support of this contention.

Local loops that were probably disappearing from the market, such as copper connections which were only used for PSTN would probably disappear from the market and should therefore not be part of the market when analysing the position for the future. xDSL connections were furthermore simply on the way out as they were being replaced by fibre-optic connections, where such connections were on offer. Siminn naturally was concerned that the lifetime of xDSL service would, subsequent to the PTA analysis, be longer than was necessary. At locations where fibre-optic had been deployed, copper connections could probably not provide fibre-optic connections with competitive restraint. There was therefore every reason to investigate these aspects.

The development of Siminn ADSL connections and VDSL connections in the territory of GR or Tengir, also gave indications that there was no substitutability between xDSL and FTTH connections. It was for all to see that ADSL and VDSL connections had decreased rapidly in the operational territories in question. FTTH connections had normally increased and there were thus no indications that there was substitutability in both directions given the situation today. The fact that for some customers it did not matter whether the connection was fibre-optic or xDSL and had for this reason not yet switched from xDSL to fibre-optic, had no meaning. The question that the PTA had not endeavoured to answer is whether a customer on fibre-optic would switch over to xDSL because of a 5-10% price increase in fibre-optic. If the answer to that question was no, then they would not be the same market.

It was clear that the PTA had not conducted the investigation necessary to define markets and the PTA draft was thus completely inadequate. As the focus was on the future, the key issue should have been the assessment of whether xDSL service items could in reality be defined as part of the same market as fibre-optic. It was Siminn's assessment that consumer behaviour was such that those who switched to fibre-optic, did not switch back and did not see xDSL service as a substitute. Siminn was not aware of any examples where company customers had requested that Siminn move them from fibre-optic service over to service over copper, but there was a significant number of examples of switching from copper over to fibre-optic.

Siminn challenged PTA to investigate this issue and to issue a new and real market analysis. Siminn then pointed out that, in connection with calculation of share and development of market position, the PTA defined the market as ADSL, VDSL and FTTH connections, while in the market share statistics, only VDSL was included and not ADSL, which gave an incorrect picture of market development. In most instances, Siminn customers were switching from one connection to another, and on the whole the Siminn share was not growing on the market, with respect to the size of the market as the PTA defined the market. It was furthermore important to examine market development and understand where the growth came from. The fact that Siminn was increasing connections in fibre-optic and thus increasing company share was first and foremost a case of switching from xDSL over to FTTH by its own customers, but actual growth in the understanding that Siminn was receiving new entries to the market or taking customers from other parties, was not the reality.

The position of the PTA

The PTA considered the cable system of Kapalvæðing in Reykjanesbær in its preliminary draft and after further data collection from the company in October 2020, the PTA's conviction strengthened that the cable system had a very limited impact on the broadband market, and one could refer to further discussion in Sections 4.2 and 4.3 here later in this document and to the same sections in the revised analysis (Appendix A).

The Kapalvæðing cable system in Reykjanesbær only reached [...] spaces at the end of 2020 and uptake is only [...] connections in that municipality, which represents [...]%. The company has no plans for further enlargement of the system, but it covers about [...]% of spaces in the municipality, which are 8,762 in total. In addition, Kapalvæðing operates a fibre-optic network, which covers [...] spaces in the town, which makes about [...]% coverage. The customers are [...] on that system, which is [...]% utilization. In that municipality, Míla has had a VDSL system which distributes to the whole municipality and has commenced fibre-optic rollout at that location, as has GR, and it is expected that this project will be completed in 2021 or 2022. It is clear that the Kapalvæðing cable system has negligible impact when one considers the whole on the retail market in question at national level and also that it has limited impact in the municipality in question. Kapalvæðing has now made an agreement to join the GR fibre-optic network and will offer its service across the whole, GR operating territory.

Though the main point of departure in PTA discussion of consumer markets in the preliminary draft is retail Internet service, IPTV connections and VoIP fixed line telephone service, the PTA wishes to keep in mind that the market for local access with fixed connection covers all local loop lease, regardless of the purpose of leasing the local loop. This includes local loops that are only used for PSTN, voice telephony, elevator telephone or payment services. In the same way the market for mass-market connections with central access covers all mass-market bitstream, not only that which is used for Internet service to households.

The PTA totally rejects that it has not conducted an adequate investigation of the bitstream market and of the various possible access technologies on offer. In Section 4.3 in the updated preliminary draft (appendix A) there is detailed discussion of the technology and products that each company offers. This includes DSL technical solutions, mobile networks, other wireless networks, and cable networks.

Since the publication of the preliminary draft, the PTA has conducted further investigations of the relevant markets. Among other things, the PTA commissioned a comprehensive survey among consumers about the factors that mainly influence the decision to purchase Internet service for the home. It was shown there that customers are to a significant degree prepared to switch from existing fibre-optic connections over to Ljósnet connections (VDSL) if the price of existing service over fibre-optic were to increase permanently by a relatively small amount.

One can also mention that in its comments, GR mentions that it is precisely that the company's perception that consumers would switch from fibre over to copper connections. GR assesses this in the case of the consumer in question living in a location where there is no other fibre-optic connection available than that of GR. According to data collected by the PTA from GR in the autumn of 2020, the number of such examples is significant in recent years and this is still happening, despite increasing deployment of fibre-optic. One can

mention in this context that in the PTA consumer survey among those that had switch service provider during the 12 months prior to the survey a significant group mentioned a package of service included as the main reason for switching, and not the performance of the connection speed. Price of service is what consumers put in first place in the survey. The PTA reiterates that Síminn's Heimilispakki (Home Package) enjoys great popularity on the market, and this is a bundle with electronic communications service and popular TV content. The PTA considers that this package is the main reason for customers switching from the GR fibre-optic system to Míla copper network, where Míla has not deployed its own fibre-optic.

Conditions on the market, in the opinion of the PTA, give strong indications that there is substitutability between connections over copper local loops and connections over fibre-optic local loops. The PTA consumer survey conducted in October 2020 appears to confirm these market conditions. There is nothing whatsoever to be found in conclusions in the survey to indicate that substitutability is not in place. This assessment of substitutability is further discussed in Section 4 here below, in the same section in the updated preliminary draft (Appendix A) and in Appendix C, where the conclusions of the above specified additional consultation are discussed.

Figures 3.4 and 3.5 in the preliminary draft show that the number of Siminn customers grows and that market share increases slightly during recent months though the increase is not large, while the larger competitor decreases, both in number and share, but smaller competitors nevertheless grow. The Siminn share dropped, however, slightly in 2020, from 47.6% at the turn of year 2019/2020 to 46.3% in the end of 2020. The Siminn share was 45.9% in 2017. One can only therefore conclude that Siminn has been maintaining its position on the market in recent years, though a small reduction has been measured during 2020. As at the time of writing of the preliminary draft, Siminn had not offered its service to any significant degree on other networks than that of its subsidiary Míla and Míla's position is therefore also strengthening, i.e., Mila's share therefore decreased less than it would have been if Síminn had purchased bitstream services from network operators other than Mila.

In terms of ADSL technology and the connections on where it is used, it is part of the substitute chain and included in the relevant market and share calculations. The number of ADSL connections actually has little effect on the share figures, as at the end of 2020, connections via ADSL were only 3% of the total connections.

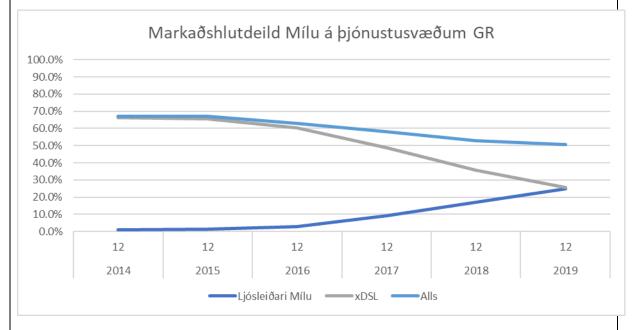
Siminn has now made an agreement with GR on distribution of its service over the GR network. This agreement was signed in July 2020 and has only just been implemented. This agreement was implemented in late august 2021. The PTA expects that the Siminn market share as a result of this agreement, all things being equal, exceed 50% market share on the relevant retail market during the lifetime of the analysis. As a significant number of new Siminn customers on the GR system will come from other service providers that are already on the GR system, the PTA does not consider that Míla market share will decrease significantly during the lifetime of this analysis, because of this agreement and will in the opinion of the PTA remain over 50% on both relevant wholesale markets. It is not inconceivable that the Míla position could strengthen if service providers such as Vodafone, Hringdu and Nova move their business increasingly from the GR network over to the Míla network.

3.2.2 Internet connections through copper and fibre-optic

Míla considered it clear that in the areas where fibre-optic networks were on offer, electronic communications companies (in wholesale) and retail customers, chose fibre-optic far ahead of other service, such as VDSL It was furthermore the Míla view, see also conclusions in AM report, pages 2-8, that VDSL service would during the period of validity of the analysis (2021-2026), not have any or at least very insignificant competitive restraint in the market areas where fibre-optic was available. This conclusion was supported mainly in two ways, see for more detail AM report, page 2:

- a. available data on the number of VDSL connections where fibre-optic was also available indicated that the number of VDSL connections was in rapid decline and had been that way for the last 3 years. See also discussion on pages 15-16 in the preliminary assessment on development:
- b. in those instances where the connections were new, an insignificant proportion of new Mila customers chose VDSL when fibre-optic was also on offer. In those areas where both services were on offer, [...]% new customers chose fibre-optic rather than VDSL.

The figure below shows how development of Míla bitstream access had been in those areas (the municipalities as a whole) where GR was also operating during the last years:



Source: Míla.

From the above it was clear that use of xDSL over copper had decreased rapidly in step with an increase in connections over fibre-optic. It distorted the picture to some extent when assessing substitutability between these service types, that the largest electronic communications companies offered their customers bundles where an Internet connection and access was offered at the same price, independent of whether the service was provided through VDSL or fibre-optic. One could however note that Hringdu had offered a lower price for VDSL. This had on the other hand, neither resulted in reactions by other electronic communications companies, such as price reduction on fibre-optic, nor increased market

share for Hringdu, and this unequivocally supported the Míla assessment that even if VDSL were priced lower than fibre-optic in retail, this would not arouse perceptible interest of end users in switching from fibre-optic over to VDSL. This means that there could not be substitutability between VDSL on the one hand and fibre-optic on the other, from the point of view of end users.

It was perfectly clear in Míla's opinion that there was not substitutability between VDSL and fibre-optic for electronic communications companies in wholesale, as it was clear that the electronic communications companies would choose fibre-optic rather than VDSL. Pricing of the products in wholesale supported this, as it seemed that it had no impact on Míla share, for example in VDSL, if it was priced considerably lower in wholesale than fibre-optic. In the same manner, there was no supply substitutability between VDSL and fibre-optic in wholesale, neither in Market 3a or 3b.

In the AM study, see attached report, on proportional division of broadband connections by type, where fibre-optic was also available, one could see that a complete reversal had taken place since the last market analysis from 2014, where fibre-optic networks had 30% share and copper 70%. The fibre-optic network had now exceeded 70% share and was rapidly increasing.

In the AM report, pages 2-4 in Section 2.2, the opinion was voiced that VDSL would not be a significant competitor to fibre-optic networks during the period of validity of the analysis, 2021-2026. According to AM, VDSL connections were rapidly decreasing, and a very small proportion of new customers chose VDSL in those areas where both VDSL and FTTH were offered.

AM also drew attention to the fact that competition took place with offer of included data volume at the same price, regardless of the nature of the underlying network and the Hringdu offer of a less expensive subscription option for VDSL had not led to a reaction from competitors. In this way one could see that VDSL was not an attractive wholesale product when compared with FTTH, even if there was a price difference at wholesale level.

AM said that in Sweden, 63% of those who had access to FTTH chose that service. The proportion was similar in Iceland as in Sweden, cable and FTTH had achieved about 74% market share, and as a reaction to this, the PTS had defined separate markets for FTTH and copper, and even though the analysis had been retracted, that had been for unrelated reasons.

The position of the PTA

Míla says that the largest electronic communications companies offered their customers bundles where an Internet connection and access were offered at the same price, independent of whether the service was provided through VDSL or fibre-optic. One can however note that Hringdu offered a lower price for VDSL. This had on the other hand neither led to reactions by other electronic communications companies, such as price reductions on fibre-optic, nor increased Hringdu market share, and this unequivocally supports the Míla assessment that there is substitutability between Internet connections over VDSL and fibre-optic.

The PTA points out that against this that one may consider that electronic communications companies do not see a competitive opportunity in reaching price sensitive customers with less expensive connections with impaired bit speed, nor was it possible to price more powerful

connections at a higher price as a "premium" product. This supports that there is substitutability.

One must consider there to be an overwhelming likelihood that consumers would not let having to move from a property with fibre-optic connections to another where only VDSL was on offer, deter their purchase of real estate. A chain of substitutability does not have to be equally active in both directions for there to be substitutability in place. This indicates that consumers do not see such a difference in quality between VDSL and FTTH that sellers see a revenue opportunity in such a value difference.

The Hringdu subscription discussed also includes a limited amount of data and is therefore only useful for those who have little or no Internet usage through streaming providers.

Assessment of substitutability cannot be decided solely by electronic communications companies seeming to choose fibre-optic rather than VDSL. It is clear that this is development that has taken place for some time and will continue to do so. Other factors such as the same price at retail level and the same kind of marketing of the product, irrespective of underlying network, are much more important in this case.

One can indicate a recent market analysis by ARCEP in France on the relevant markets (Cases FR/2020/2277-2278) in this connection. In that country there has also been considerable reduction in copper connections at the cost of fibre-optic connections and this development will continue throughout the lifetime of that analysis. ARCEP also came to the conclusion that there was still substitutability between copper and fibre-optic and the EU Commission made no comment on that conclusion. The French Competition Authority also agreed with this conclusion and challenged ARCEP to closely monitor the development in this respect. ¹

Míla refers to fibre-optic networks now having more than 70% share and copper networks thus under 30%. The correct figures are that in end of 2020, the proportion of fibre-optic was 64% against 36% proportion of copper.

As the PTA has previously shown in this document, there are several indications that this development is slowing down. The PTA allows for the weighting of copper connections to remain significant at the end of a lifetime of this analysis.

In other respects, the PTA refers to detailed discussion and arguments for the substitutability in question being in place, in Sections 3 and 4 in the revised analysis (Appendix A), here before in this section and in Section 4 of this document and in Appendix C (conclusion of additional consultation).

Míla referred to available information from the PTA on end-user usage of fibre-optic network and xDSL (mainly VDSL), which indicated that users of fibre-optic used 60% more download and 145% more upload on average per annum. This indicated in the opinion of Míla that there was not substitutability between fibre-optic and VDSL for end users and in fact it was very

49

¹ On page 4 in the opinion of the Commission from 26 November 2020, it says, among other things where this decision by ARCEP is discussed: "ARCEP does not segment the relevant product market between high and very high capacity products. This finding is supported by the fact that there is no "killer app" that would be available only with high capacity subscriptions. Further, the range of services offered is the same and price differences are modest."

unlikely that end users that used fibre-optic would switch to VDSL even if the price for fibre-optic should increase, as they needed the additional possibilities offered by faster Internet service. One could not see that the PTA had investigated this in an adequate manner. This appears in the Analysys Mason report in Section 2.6 on page 7.

The position of the PTA

There is always some group of customers that jumps on the newest technology for performance and quantity, as soon as it is offered. A group of such users can have an impact on the average. The PTA points out that a chain of substitutability does not have to be equally active in both directions for there to be substitutability in place.

The PTA pointed that despite this, Míla had not considered there to be reason to stop marketing Ljósnet (VDSL) with the assertion that it fulfilled all household needs for Internet service and for IPTV service on many set-top boxes simultaneously. The PTA also refers to the conclusions of the consumer survey that the Administration commissioned and to other discussion on substitutability between fibre-optic and VDSL in PTA replies in this document, and in Appendix C.

Míla said that it was established that the Siminn plan was to completely close the PSTN voice telephony system in the first quarter of 2021 across the whole country². This change would mean that there was no longer a need to operate a copper access network in those areas where fibre-optic was available.

[...]

It was established that on the Míla copper system, there were more than 20,000 connections that only had POTS or ISDN, i.e., without xDSL connections. It was Míla's assessment that a large majority of these copper local loops would be cancelled. Most of these connections were for security and were related to elevators, sprinkler systems, security systems and suchlike. The Analysys Mason report discussed this issue in Section 2.7 on page 7.

The position of the PTA

One could assume that the retailer that currently providing these households with PSTN voice telephony was likely to move customers over to their own VoIP service before or at the PSTN switch-off. It is therefore not necessarily certain that these customers would stop using a fixed line telephone when the Siminn PSTN system was decommissioned. Siminn began closing the PSTN system in the autumn of 2020 and intends to complete that work in the spring of 2023. According to information from Siminn, this involves 17.000 connections remaining at the beginning of April 2021. Only a few hundred such connections had been phased out at the beginning of April 2021, but Siminn originally intended to complete the project before the end of 2021. It is therefore clear that this will take much longer than Siminn had planned and in the opinion of the PTA it must be considered that it is quite an ambitious plan to complete the project in the spring of 2023. In recent years Siminn has systematically been transferring fixed voice service customers from PSTN to VoIP.

-

² https://heildsala.siminn.is/

There are still some customers that only have PSTN service, and no Internet service or bitstream on their copper connection. Such customers probably consider their voice telephony service important and could wish to retain it though it were moved to another carrying technology. The PTA considers it impossible that Mila's market share will decrease by these 17.000 PSTN connections, although Mila's share may decrease slightly as a result.

Míla said that it was foreseeable that Míla would stop operating the company's copper access networks in those areas where the company had rolled out a fibre-optic network during the period of validity of the analysis (2021-2026), as it was costly to operate two parallel networks in the same area, there was less demand etc. It was furthermore established that in the next 10 years, Míla would decommission the company's copper network as a whole, but the company planned to divide the process into 3 phases. Míla had informed the PTA about these plans, see paragraph 236 and further in the PTA preliminary assessment.

In its preliminary assessment, the PTA had on the other hand, evaluated those plans, and the fact that share of copper network would continue to decrease with increased share of fibre-optic networks, would have little impact on development during the lifetime of the analysis, as it had not had an impact on substitutability continuing to exist between copper networks and fibre-optic networks on the relevant market during the lifetime of the analysis.

Míla considered this basic PTA position would not withstand the light of day, as it was perfectly clear that as it was established that a specific service would no longer be provided during the lifetime of the analysis, that service could not be considered an option at all for customers, and thus in competition with fibre-optic networks on the basis of the substitutability consideration, as there was no substitutability. There was furthermore every likelihood that electronic communications companies would be circumspect about purchasing such service where it had not been decommissioned in order to sell to new customers, having in mind the cost and work required to migrate customers over to another network in the foreseeable future, particularly and especially when it was established that they could offer the same customers a long term solution, such as fibre-optic, from the first day of business. It was among other things the Míla assessment that the PTA had in no manner taken this adequately into account, see instructions in article 14 of the ESA recommendation to the effect that one is obliged to take a forward-looking view of development and then at least to the end of the period of validity of the analysis.

The Analysys Mason report discussed this issue in Section 2.7 on page 7.

The position of the PTA

It has repeatedly been stated that the PTA expects the lifetime of the analysis to be an estimated 3 years, and not 5-6 years, because of the current rapid development on the relevant wholesale markets and related retail market during the coming years. A similar comment has been answered in detail at another place in this document, and reference is made to that.

Míla rejected that there was a chain of substitution, in the understanding of articles 43-45 of the EU Guidelines, between access and broadband service over copper on the one hand and fibre-optic on the other. The PTA had come to the preliminary conclusion that on taking into account the service offers in this country and practices elsewhere in the EEA, there was a

chain of substitution which supported that Internet connections over a copper network and Internet connections over fibre-optic network belonged to the same retail market. In addition to this, homogeneity in pricing and service-offer on varying Internet connections strongly indicated that they belonged to the same market.

In the above specified provisions in the recommendation, there was among other things discussion on the conditions that had to be in place for there to be a chain of substitution. It was among other things, a condition that the substitutability between the products in question needed, as before, to be substantial. The PTA has not demonstrated that conditions for the above specified provisions of the guidelines were fulfilled, such that there was a case of substantial substitutability. Míla considered that substitutability did not exist and that a break in the chain had occurred because of the significant technical and speed difference between these two networks.

The significant speed difference between xDSL connections and fibre-optic connections in reality meant that the networks and the services provided through the network are neither comparable and nor can substitutability exist between them. In this connection it would be worthwhile noting that between xDSL generations, speed had generally doubled or increased by a factor of four. For example, the fastest network speed on offer here Mila by technology is as follows:

- ADSL: 8Mb/s down and 0.6 Mb/s up
- ADSL2+: 12Mb/s down and 1 Mb/s up
- VDSL2: 50Mb/s down and 25 Mb/s up
- VDSL2 with vectoring: 100Mb/s down and 25 Mb/s up.

Fibre-optic connections were on the other hand much faster and in reality, one could see they could achieve any speed whatsoever by switching out endpoint equipment.

- Current fibre-optic connections to households: 940 Mb/s down and 940 Mb/s up (what are called 1 Gb/s connections).
- Next generation Fibre-optic connections to households which are already on offer at several locations abroad: 10,000 Mb/s in both directions.
- technology is under development and standardisation which can offer households 100,000 Mb/s at a manageable price. (It is expected that the technology will be on the market during the lifetime of the analysis.)

Míla considered that further upgrades of bitstream service over copper, including what is called G. Fast, were not worth the cost. The main reasons were high start-up and operational costs for fewer customers for each equipment as copper sub-loops for such connections were 30-50 m long to reach full speed of the connections. There was also the fact that the belief of end users and electronic communications companies that such a service would not fulfil their needs for the long term, weighed heavily.

Míla pointed out that where municipalities had deployed fibre-optic systems and Míla had not had bitstream service in the area over copper, Míla had simply chosen to provide bitstream service over the municipality's fibre-optic system. In all such instances Míla did not offer

bitstream service over its own copper network but only over the fibre-optic system of the municipality. The reason for this is the Míla assessment that bitstream service over copper would not be competitive with such service over fibre-optic. Míla considered this to be a clear example of copper and fibre-optic local loops not being on the same market.

Míla competitors have placed strong emphasis in their marketing material on this difference in service and consumers appear to have reacted to this. In this way it seems that the opinion among the public has been formed that broadband connections over copper were "oldfashioned technology", while fibre-optic was "modern" and in addition to this, users and electronic communications companies considered there to be more faults on copper connections than on fibre-optic and copper was thus a "second-class" product. In addition to this, it seemed that parties to the market considered that the useful life of fibre-optic connections was much greater than that of xDSL connections and that it therefore was not worthwhile installing new xDSL connections if the fibre-optic option was available. The effect of this can clearly be seen in the huge reduction of copper local loops during recent years, and one can expect this development to continue throughout the lifetime of the analysis. Here one can point out that of the [...] orders received by Míla, during the period 1 January 2020 to 31 May 2020, in those areas where there was a choice of VDSL and GPON, [...] of the orders were for fibre-optic which is [...]%. If networks of other parties were included one could estimate that this proportion would be even higher, probably over [...]. One could therefore not conclude otherwise from this than that Mila customers, except a negligible number of them, did not consider VDSL connections a feasible option for end users when compared with fibre-optic connections.

One could note, that in specific areas, Míla could only offer Ljósnet over copper local loops in competition with fibre-optic systems. Míla's experience was that Ljósnet through copper local loop (VDSL2) was not considered comparable to "real fibre-optic" by end users and electronic communications companies; these were not alternative products but on the contrary, customers preferred fibre-optic because of the difference in speed between the systems. As Míla has access to fibre-optic from other parties, Míla paid a special access charge to systems e.g. Tengir and Snerpa, on top of the local loop charge from these companies, in order to be able to offer bitstream service over fibre-optic. It was clear that Míla would not purchase such service if it was not necessary for requirements of end users. Míla considered that this also supported the view that bitstream service over copper is not considered to be substitute service for bitstream over fibre-optic and that therefore they should not be deemed to belong to the same market.

In the Mila submission document that contains comments on individual paragraphs of the preliminary draft it is said that it is unlikely that ISDN and ADSL can be considered substitute service for fibre-optic, but ISDN and ADSL are at some locations the only option Mila has to fibre-optic of other parties.

In an accompanying document with the Míla comments, a report by Analysys Mason, it is also denied that there is a chain of substitution. The PTA has not presented any evidence for a chain of substitution other than referring to a variety of technical solutions that are on the market. The PTA also considered that a price anchor in copper would not constrain pricing of fibre-optic and such a position speaks against a chain of substitution. In the United Kingdom, both copper and fibre-optic connections have been deemed to be on the same

market, because copper connections exercises restraint, but that could be because deployment and take-up of fibre-optic is much less in the UK than in Iceland.

The position of the PTA

The PTA refers to previous answers on substitutability in this document, as well as in Chapters 2 and 3 of the updated preliminary draft (Annex A) and in Annex C and indications that can be seen in the consumer survey commissioned by the PTA in October 2020 about those factors that mainly decide the decision to buy Internet service for a household. There it was stated that customers are to a significant degree prepared to switch from existing fibre-optic connections over to Ljóslína connections if the price of existing service over fibre-optic were to increase permanently by a relatively small amount, and there were other indications of substitutability.

Contrary to Míla assertions here above, it was furthermore shown that a significant part of consumers appeared to have switched service provider during the last 12 months prior to conducting the survey, such that they migrated from a service provider that provided a connection over fibre-optic network of a Míla competitor to a party that provided his service through copper local loops. The price of service appeared also to have been the strongest factor in the decision to buy for those who have recently switched service provider, not the performance of the underlying connection. There it is also shown that the large majority purchase electronic communications service in a bundle and that Siminn's Heimilispakki (Home Package) is a strong player for such products. There are many examples of service provider customers that have been on the GR network and have switched to a Míla copper network to be able to use the Home Package in question. Though Míla can see indications that speed of connections is advertised by retailers, it seems that these advertisements do not control or have an impact on the willingness to buy when the purchase actually takes place.

Furthermore, the PTA has data at its disposal from GR which show in black and white that a significant number of GR's customers of fibre local loops have switched to Míla's Ljósnet in recent years, and this development is still ongoing.

It should also be pointed out that the Míla website states that the speed offered on the company's Ljósnet (VDSL) is up to 50-100 Mb/s and that it would be possible to have up to five set-top boxes for television services and sufficient speed for all household use. It can therefore only be seen that Míla's marketing is based on the existence of a substitute. The same can be said about Siminn. It is therefore not a very convincing argument on the part of the Síminn Group in this case that it now responds that the companies believe that such a substitute does not exist. It may also be mentioned that in its comments on the PTA Draft Decision, which became the PTA Decision no. 31/2017, dated December 29, 2017 (Míla's designation of universal service obligations), the following statement was made by Míla, which the PTA considers showing that Míla actually views xDSL connections as a substitute for connections via fibre networks:

"In the coming years, DSL systems will be able to meet the needs of speed and be able to compete in the urban market from a technical point of view. With the current price obligation and increasingly inefficient operations, especially in rural areas and small populations, DSL systems will not be able to compete on the basis of market laws. Mila therefore considers it important that the price obligation is lifted so that it is possible to

protect the value of these infrastructures on the market so that their existence increases options and strengthens competition." (PTA's letter change)

Míla refers to the fact that in paragraph 44 of the guidelines it is stated that when pricing of existing technical generations can exercise competitive restraint on pricing of new technical generations, then there can be grounds for defining the services on the same product and service markets. The PTA has however not presented any evidence that verifies that pricing of service over copper exercises competitive restraint on pricing for fibre-optic. On the contrary, conditions on the market supported another conclusion. It seems that the PTA in fact itself admits in the preliminary assessment that such restraint does not exist, see the Administration's arguments for not setting an anchor price based on price control of VDSL, as this would not place restrictions on fibre-optic. In other words, there is no chain of substitution, because if there was then VDSL would actually be chosen instead of fibre-optic.

The position of the PTA

After having examined its reasoning regarding lack of a copper anchor in the light of comments submitted and taking into account the Recommendation 2013/466/EU, the PTA considers that it had underestimated the impact of cost analysed prices for copper local loops in its preliminary assessment. It is clear that the retail price for fibre-optic network echoes the retail price for the copper network, as electronic communications companies do not distinguish between underlying networks when they price their retail service. Though the retail price of line charge has increased faster than increases of the line charge in wholesale, it is possibly appropriate to also take into account pricing of retail packages as a whole. The price of service packages has generally not risen in the same manner as line charges. Copper local loops are still about 64% of the total number of Míla local loops on lease, so they still represent a significant size on the market.

In the consumer survey conducted by the PTA in October 2020 it came among other things to light that a large number of users were ready to switch over to Ljósnet (that is to say VDSL copper local loops) if the price of packages on the fibre-optic network (FTTH) rose by approximately 10% It also came to light that speed is in general not a deciding factor when choosing Internet service. The PTA also has data from GR that demonstrates such a transfer from fibre networks to copper networks to a considerable extent. This supports the conclusion that cost analysed connections over copper local loops, can exercise restraint on retail fibre-optic service.

One must also consider what is not on offer on the retail market as neither Siminn nor Vodafone have offered a higher price category of Internet service with a speed that only fibre-optic can offer. On the basis of the conclusion of the consumer survey, consumers are generally not prepared to pay a higher price for fibre-optic connections. This indicates that a copper anchor is in fact in place. An indication of copper anchor can also be found in the tariffs of Hringdu and Hringiðan, where the monthly price for Internet subscription increases in increments according to speed, but there is no step in their tariffs that differentiates connections over copper local loops from connections over fibre-optic local loops.

Míla refers to precedent from Sweden, where copper and fibre-optic connections were not considered to belong to the same service market. Despite the fact that older foreign precedent indicated in some instances, that copper and fibre-optic could not be on the same market, there were also known examples that are newer where copper and fibre-optic have been defined on the same service market, such as in a recent case from Sweden. In 2019 PTS in Sweden has found out that in the "eyes of the user", there was not substitutability between them but rather that local loops over copper and fibre-optic were not on the same market. Míla considered that the same situation existed in Iceland as 9 of every 10 purchasers of new connections where there was an option of copper or fibre on a Míla network chose fibre-optic. If networks of other parties were included it was clear that this proportion would be even higher, probably over 95% of purchasers.

Míla considered it necessary to further discuss the grounds for the PTS market analysis in Sweden that Míla considered could be a model for a PTA market analysis. This was the newest analysis that had been made in the Nordic countries and one could say that circumstances in Sweden were similar to those in Iceland, e.g., with respect to consumer attitudes regarding their electronic communications needs. Other circumstances in Sweden were also in various respects similar, e.g., fibre-optic had been deployed to a similar proportion of households there as in Iceland. There, in most cases, a single fibre-optic had been deployed to households while in Iceland two had been deployed to about 57% of households.

In the market analysis, the PTS had discovered that copper and fibre-optic local loops were not on the same market and the main reason for this was that users did not consider there to be substitutability between them. The PTA had come to this conclusion by conducting a user survey where people were asked why they had chosen the network they were using. The conclusion was that people, i.e., end users, chose fibre-optic services in order to achieve higher speed, less delay on data and a lower fault frequency. The PTA had made no such survey in Iceland. The EU Commission raised no objections to the PTS analysis of the service market. Míla considered that precisely the same situation existed in Iceland, i.e., that end users and electronic communications companies considered copper and fibre-optic not to be in the same market. This could, among other things be seen by the substantial migration taking place over to fibre-optic.

In discussion in the preliminary assessment, the PTA came to the conclusion that conditions in Sweden were not comparable to market conditions in Iceland. This was particularly for the reason that the Telia market share was quite different from that of Míla. In the PTA preliminary assessment, Telia was said to have a 37% market share of the fibre-optic market in Sweden. The PTA compared that market share on the other hand with the Míla market share of the local loop market (copper and fibre) and said that it was about 63%. The PTA was clearly not comparing the same things, because if the PTA compared the Míla share of the fibre-optic market, then it was about 30-35%. Telia had the largest market share for fibre-optic in Sweden, but this was absolutely not the case with Míla, it was rather GR that had by far the largest market share of the fibre-optic market.

The position of the PTA

The PTA discussed at length the above specified case from Sweden in Appendix A-1 to the preliminary draft and refers to that discussion. The PTA reiterates however, that

circumstances in Sweden and Iceland are in so many respects dissimilar that it is not possible to make substantial comparison. In Sweden the PTS came to the conclusion that there was a break in the chain of substitution between service provided over copper network and service provided over fibre-optic, where on the other hand there was poor performance and more expensive service on copper and on the other hand, cheaper and higher performing service on fibre-optic. The break in the chain is thus because VDSL was not generally on offer and the offer chain that Míla so precisely describes in the previous comment therefore does not exist. The Telia copper system is many locations not adequate to carry the VDSL bitstream and there is a historical reason for this related to the methods that were chosen when the system was developed. Telia was therefore fixed in ADSL technology in large areas when competition from fibre-optic was developed, while in this country Míla answered competition from fibre-optic with rapid and widespread distribution of VDSL. In a previous comment from Míla here above, Míla admits that the company's VDSL2 system is very good. Conditions are therefore totally different between the countries.

Subsequent to consultation on the preliminary draft, the PTA commissioned a consumer survey. The conclusion of that survey was in the opinion of the PTA that there was still substitutability in this country. Unlike the conclusion in the consumer survey in Sweden, where the conclusion was that consumer choice was decided mostly by speed of connection, data delay and fault frequency, consumer choice in this country is decided first and foremost by the quality-of-service provider and bundles. Speed is below that. This is a strong indication that quality of xDSL connections in this country is much higher than in Sweden. There is also the fact that most people that use the copper system in this country consider the connection adequate for household needs, which is not the case in Sweden.

Míla says that there are more examples from Europe than the above specified example from Sweden that show that substitutability does not exist. The PTA rejects this and does not know of any examples of decisions from Europe on separating markets for copper local loops and fibre-optic local loops. One can finally observe that the PTS has not made a final decision on this, as the Administration withdrew the analysis at the beginning of 2020 because of insufficient geographic analysis. There is no analysis in Europe in force today, that the PTA are aware of, where the conclusion is that there is not substitutability between copper and fibre-optic.

Reference is furthermore made to discussion on substitutability in Section 4 here below and to sections 3 and 4 in updated preliminary draft (Appendix A) and to Appendix C, where there is discussion on the conclusions of the additional consultation opened by the PTA on 30 October 2020.

Míla considered the PTA investigation to be inadequate with respect to substitutability between fibre-optic and copper. The PTA had not investigated and adopted an independent position on the special market conditions to be found in this country, as it seems that the PTA conclusion on potential substitutability between copper and fibre-optic is based almost solely on and old recommendations from BEREC from 2014 and on PTA references to foreign precedent in market analyses, without an independent investigation of the nature of the Icelandic market. The PTA has thus not fulfilled its duty of investigation pursuant to article 10 of the Administrative Procedures Act number 37/1993 when assessing substitutability on

the one hand between service over copper and on the other hand over fibre-optic, and this applies both to end users in retail and electronic communications companies in wholesale, for example with the carrying out of what is called an hypothetical monopolist test on evaluation of demand and supply substitutability on the market, see in more detail paragraph 29 et seq. in the Commission recommendation on assessment of market conditions. As this had not been done, the PTA had not adequately taken into account, and at the same time investigated, the characteristic behaviour of end users and of electronic communications companies in this country of choosing fibre-optic instead of copper, where fibre-optic is offered, even though access to service through copper was priced lower in wholesale than fibre-optic.

In order to fulfil its duty of investigation, the PTA needed to assess the market on the basis of conditions that prevailed in this country, see also Supreme Court judgement in case no. 111/2014, Competition Authority and Icelandic State versus Vifilfell hf. (Vifilfell Case), where the ruling of the Competition Authority Appellate Committee was rescinded as the Competition Authority had not provided grounds for the definition that the Authority applied in its decision on the market to which the events of the case related, with an appropriate investigation pursuant to the provisions of article 10 of the Administrative Procedures Act. The court considered it appropriate to exercise caution in applying the opinion of foreign competition authorities to market conditions on consumer markets in their home countries to conditions in this country. On the contrary, an examination should have been directed at real conditions in this country at the time covered by the investigation. From the above one can conclude that the more important a specific issue is for the conclusion of a case, the greater the requirements one can make for investigation by the authority in question on the basis of article 10 of the Administrative Procedures Act on that specific issue. It was clear that the PTA market definition is furthermore a basic prerequisite for the Administration being able to take an informed position on whether competition is sufficiently effective on the defined markets, having in mind a forward-looking perspective on future development of the market, and thus whether it was necessary to impose obligations on one or more companies on the market.

In the Analysis Mason report, reference is made to the fact that a very large proportion of purchasers in those areas where fibre-optic is available, choose fibre-optic, which means that VDSL will only be a small fraction of the number of connections during the period of validity of the analysis (2021-2026). Reference is made to Section 2.2 in the report in this connection.

The position of the PTA

The PTA once again rejects that the assessment of substitutability in the preliminary draft was inadequate and that the issue had not been adequately investigated, and not least rejects that the conclusion was solely decided by a BEREC recommendation from 2014 and foreign precedent. The investigation certainly analyses the situation here today in this respect, and the ESA recommendations on the relevant market and the ESA guidelines on market analysis are consulted with respect to the manner in which the assessment is made. Reference to European precedent is for the sole purpose of drawing attention to the fact that there is no market analysis in force in Europe, which has come to the conclusion that such substitutability is not in place.

Míla states that caution should be exercised when applying the opinion of European NRAs to market conditions, in this country. The PTA repeats that the Administration's conclusion with

respect to the substitutability assessment is decided solely by competitive conditions in this country. It is thus inconsistent that Míla should demand that the PTA should base its assessment on a draft market analysis from that has been withdrawn. This is a draft market analysis which contains plans that are contrary to conclusions of all other NRAs in Europe, with respect to the substitutability assessment in question.

Because of serious concerns raised by the Siminn Group about the above specified assessment of substitutability and despite the fact that the Competition Authority and all other electronic communications companies that offered an opinion in the consultation on the preliminary assessment, the PTA decided to conduct an even more detailed investigation on this issue, among other things with a detailed questionnaire to electronic communications companies and by commissioning a consumer survey. In the consumer survey in question, one can find among other things, questions that relate to the use of a hypothetical monopolist test.

In other respects, the PTA refers to prior answers to comments on substitutability assessment in the preliminary draft and conclusions of the consumer survey from October 2020 in Section 4 here below, to the sections 3 and 4 in the updated preliminary draft (Appendix A) and to Appendix C that relate to the conclusion of additional consultation.

Míla considered that it would be straightforward for the PTA and actually legally obligated to conduct a detailed investigation of alleged substitutability between copper and fibre-optic, including the execution of a formal hypothetical monopolist test in order to verify the assertions presented by the Administration in its preliminary assessment of substitutability, such as with a market analysis directed at end users and electronic communications companies on the market. It did not seem uncommon that such surveys were used abroad, see references in the AM report and the Ofcom study from January 2020 and from Malta from 2012, to name but a few examples. The competition authorities in this country have increasingly used such market surveys in connection with investigations of product and service markets, and geographic markets, such as in mergers. One should assume that such an investigation was in fact necessary for the PTA to be able to make a realistic assessment of conditions and demand on the market, such as whether users and electronic communications companies would switch to VDSL in the event of a price rise, and then at what price difference. This would furthermore be a basic prerequisite for the PTA to be able to adopt a position on potential market strength of one or more companies on the market.

Míla also considered it important to emphasise that although, in the guidelines from the Commission with respect to market analysis, it was stated that market analysis was fundamentally based on the relationship between the relevant wholesale and retail markets, with the addition of possible related markets, it was clear from established precedent in European practices that though conditions on the retail market could give NRAs indications of the structure of the wholesale market, they could not give a definitive conclusion on the market position of companies at wholesale market level, see also article 21 of the guidelines. This is also compatible with considerations that were put forward in the grounds for the District Court judgement in the previously referenced Vífilfell case, to the effect that when assessing substitutability, one had to take into account the products in question, as perceived by the customer of the party in question, i.e., the reseller.

In the Analysys Mason report there is more detailed discussion about the process of market analysis in the UK and in Malta. Reference is made to a document from OFCOM: Consultation: Promoting investment and competition in fibre networks – Wholesale Fixed Telecoms Market Review 2021-26, where OFCOM had submitted data about supply and demand substitutability and to a consumer survey using SSNIP question that OFCOM conducted on the market for fixed access, where it had come to light that consumers that had connections with fast speed were less likely to switch service.

Analysys Mason also discusses definition of markets in Malta in 2012, where a consumer survey was conducted to investigate demand-side substitutability.

The position of the PTA

The PTA has reacted to this comment by conducting such a survey and its conclusions support the PTA assessment of market conditions presented in the preliminary draft. The PTA then provided stakeholders with the opportunity to express their opinion on the consumer survey in question and on the PTA position that it was not appropriate to withdraw the preliminary assessment that there was still substitutability between copper and fibre-optic connections. Furthermore, subsequent to consultation on the preliminary draft, the PTA gathered extensive data from electronic communications companies, that support the PTA position.

Míla mentions that although conditions on the retail market can give NRAs indications of the structure of the wholesale market, they could not give a definitive conclusion on the market position of companies at the wholesale level of the market. The PTA agrees with this, and the PTA conducted distinct substitutability assessment for retail and wholesale levels and came to the conclusion that there was substitutability at both levels.

Míla considered that the PTA investigation did not take into account market development during the lifetime of the analysis. It seems that a position is only taken on the status as it has been, and not on development of the market as this would transpire during the lifetime of the analysis (2021-2026). It seems that in the market analysis, only 4 points in time are examined, i.e. the status of the market at the beginning of 2018 and 2019 and half year statistics for the same years. There was no available information for the year 2020. In the same manner the fact that copper was declining steeply was ignored, while it was, furthermore, established that Míla would completely decommission copper networks in certain areas. In addition to this, the impact of the Siminn decision to decommission the voice telephony system (PSTN) was not taken into account.

With reference to article 14 of the ESA recommendation, Míla considered that the PTA was obliged to take into account these foreseeable changes on the market and to present a clear picture of market development during the lifetime of the analysis, such as with regards to market share of the companies in question and to other facts. This was completely lacking.

The position of the PTA

The PTA denies not having taken into account possible future development of the relevant markets. When the preliminary draft was written, early in 2020, the end of year statistics for 2019 were not available from electronic communications companies. The preliminary draft was therefore based on the newest available statistics as of from mid-2019. The final

document will be based on statistics for end of year 2020. As the PTA has explained in more detail in the additional consultation that was opened in on 30 October 2020, the Administration plans to collect annual data early each year on the end of year position, and to recompile a list of municipalities where lighter obligations apply. The PTA will receive information on the position for the year 2021 early in 2022, hopefully, not later than February/March.

Subject to consultation on the preliminary draft, the PTA sent a detailed questionnaire to the electronic communications companies, for example, at least four times to Míla, with the objective of strengthening the grounds for more detailed projections with respect to potential development of the relevant markets during the lifetime of the analysis. It is not expected that the lifetime of the analysis will be longer than until end of year 2023, possibly shorter if significant changes occur on the market during the next months or quarters. It proved difficult to gather information from mobile phone companies on potential distribution and impact of 5G rollout during the coming years, among other things because of Covid-19, and because of the potential banning of electronic communications equipment from a specific manufacturer based outside the EEA.

It proved extremely difficult to gather information on Míla distribution plans for fibre-optic rollout during the lifetime of the analysis. In October 2020, Míla could not provide the PTA with information about the estimated number with respect to roll-out of fibre-optic networks in the year 2021, and certainly not with a breakdown by municipality. The PTA had not yet received this forecast at the end of April 2021, despite repeated requests to that effect. This did not present a problem for other infrastructure companies such as GR, Tengir, Snerpa and Austurljós. Míla could in fact only provide the PTA information about estimated total amount of investments for the coming years. It is remarkable that the party that criticises the PTA most for not providing an adequate future projection, and which is the largest party on the market, should be the party that makes it most difficult for the Administration in this respect. Mila's roll-out plans for 2021 to 2023 were finally received by the PTA at June 15 2021, after the draft analysis had been sent to ESA for informal consultation.

The PTA has now revised its future projections with respect to various issues in the analysis, in a revised analysis (Appendix A), in Chapters 3 and 4 and other places, and in addition to this the PTA has in other places in this document answered various comments that relate to the subject. Reference is made to this.

Míla refers to paragraph 153, where among other things, it is stated that services that provide varying data transfer capacity can belong to the same market. Míla points out that connections with ISDN and ADSL are unlikely to be deemed substitute products for fibre-optic connections. ISDN and ADSL are however at a number of locations the only options on M3a that Míla has to fibre-optic from other parties.

The position of the PTA

The PTA points out that a chain of substitution can be such that products at the end of the chain are not direct substitute products, but in the offer on the market there are products in between that are a logical progression, each after the other. In this way, the PTA came to the

conclusion that there is substitutability between these service types on the basis of a chain of substitution.

Míla refers to paragraph 158, where among other things, it is stated with respect to supply-side that there is a chain of substitution between connections with varying speeds and quality, and even more likely on the demand-side. Míla says that it is correct that in most cases it is possible to upgrade from a lower speed xDSL connection to a faster connection such as VDSL. In large areas in the countryside [...]. It is not possible to upgrade to a faster connection, except with fibre-optic rollout. This is the main reason why the state saw no other option than to commence fibre-optic rollout in such areas. It is clear that as soon as the enduser has the possibility of fibre-optic connection, use of xDSL discontinues and Míla will decommission its copper network in such areas during the next 1-2 years.

The position of the PTA

The PTA points out that there are very few ADSL connections today on the relevant wholesale markets and corresponding retail market. The PTA plans and has explained this in more detail in the previously referenced additional consultation, to collect data on an annual basis about the status of the local loop and bitstream markets in municipalities that will reveal development on the markets and where lighter obligations will apply.

ADSL connections in use were about 3% of leased local loops at the end of 2020, which means that they are just under 8% of xDSL connections according to the figures at end of year 2020. As Míla says, users that only have access to ADSL have decreased because of the project Iceland Digital Connected and will continue to decrease as the project progresses. These users are in a few far-reaching and sparsely populated areas. One can also consider it likely that use of ADSL in urban areas is to some extent legacy connections to payment systems or analogous equipment that does not require high capacity. These are connections that have performed their functions for a long time and will continue to meet the needs of the users until the demands and needs of users increase.

Míla points out with respect to paragraph 159 where among other things it stated that the PTA considers that in this country there is a chain of substitution that supports the contention that Internet connections on a copper network and on a fibre-optic network belong to the same market, that in many locations where ISDN or ADSL is offered, the next option is fibre-optic. Widely, where traditional, VDSL connections are offered, faster, VDSL connections with vectoring are not offered. G. Fast, which is the next generation copper connection, is not offered anywhere in Iceland. This means that in large areas an upgrade from ISDN or ADSL to fibre-optic is the only option. It is also clear that in the mind of the users, there is no substitute in reverse in the chain, that the PTA says exists. Very few users that have the option of fibre-optic would change back to xDSL, even if the price difference were significant. Hringdu sells xDSL at a lower price than fibre-optic connections but has not had much success with this product offer.

Míla considers that conditions in this country are different than in most locations in the EEA/EU area and that market analysis should take account of the conditions on the markets

under discussion. Miller therefore considers that the PTA cannot refer to practices elsewhere in the EEA, but rather the Administration should conduct the analysis that is expected to be done in order to come to a conclusion. In the opinion of Míla, there is no chain of substitution and at many locations there is a very significant difference between the capacity of existing copper networks and fibre-optic networks.

The position of the PTA

Reference is made to prior discussion on substitutability and to Section 4 here later, to the conclusion of the PTA in chapters 3 and 4 in the revised preliminary draft (Appendix A), Appendix C, which the consumer survey from October 2020 confirms. Nothing in the above specified comments has not been answered here above or will be answered in Section 4 here below.

Míla objects to the PTA conclusion presented in paragraph 160, i.e., that Internet connections provided in this country on a copper network and those provided on a fibre-optic network belong to the same service market at retail level, as ill-founded and with little support from data. The PTA has thus not conducted a hypothetical monopolist test, which should be one of the fundamental tests in such an analysis. Furthermore, the consumer chooses fibre-optic in 90% of new connections, where both copper/VDSL2 and fibre/GPON are on offer. In the opinion of Míla, the PTA should investigate the opinions of consumers and electronic communications companies as is the general practice in such market analyses abroad.

The position of the PTA

The PTA posed the question in the previously referenced consumer survey on what the consumer reaction would be to a small but non-transitory price increase on the services in question and the conclusion was that a significant proportion of consumers would switch to a connection on a copper network if the existing fibre-optic connection were subject to a non-transitory price increase of a relatively small amount.

When consumers are given the option by their service providers of choosing between copper local loops with VDSL service or fibre-optic local loops, it is understandable that the fibre-optic local loop will be chosen if the service is at the same price for the consumer as the fibre-optic connection offers more speed and as in the long term such a connection is considered a better solution for users' future needs. The largest electronic communications companies on the market do not distinguish in price in retail between copper/VDSL2 and fibre-optic local loop, so one should not be surprised if the majority choose fibre-optic local loops in the case of a new connection. This has no impact on assessment of substitutability. The fact that these products are sold at the same price in retail, is however a very strong indication that there is substitutability.

Nova also refers to the above specified paragraph 160. Nova would agree that Internet connections on a copper network and fibre-optic network belong to the same service market. Simin marketing in general made no distinction between the service that was provided, whether the service was delivered over xDSL (copper) or fibre-optic connections. Although

the general data speed was more over fibre-optic, such a connection was for example in no way a condition for Siminn general provision of service over the Internet, such as IPTV, Heimilispakki (Home Package) with Siminn TV, voice telephony and general Internet access. As was well known, Siminn targeted its customers with the very strong Home Package, and that applied both to customers who used the copper network and those who use the Míla fibre-optic network. Statistics on the market also strongly indicated that parties to the market that offered service over fibre-optic found it difficult to appeal to Siminn customers that used the Home Package over xDSL. These examples clearly demonstrated that there was complete substitutability between Internet connected service provided over copper/xDSL and fibre-optic.

The position of the PTA

In its investigation of the retail offer in Internet service, the PTA saw no indication that there was such a difference in competitive conditions, whether between regions, or by underlying network, that retailers could see an opportunity to realise such a difference with "premium" pricing or with any other differentiation of their products from those of the competition. Competition seems to be limited to price and included data volume, also to the offer of bundled solutions of various included services in addition to Internet service. This strongly indicates substitutability between service over copper networks and fibre-optic networks.

3.2.3 Distinction between standard broadband access and high-quality access at the retail level

Vodafone refers to paragraph 162 where it was stated that many small and medium companies did not need Internet connections that were any different to those offered on the market for individuals, and for this reason the PTA did not see any need to distinguish between such service to companies and service to individuals and for this reason, the Administration considered that such service belonged to the same retail market as Internet connections to the home.

Vodafone pointed out that both GR and Míla were pricing standard service in different ways depending on whether the end customer was an individual or a company. Vodafone considered that this was not compatible with EU recommendations and that these companies and other companies that provided standard connections over e.g., fibre-optic, were obliged to provide the standard service at prices that were not dependent on whether the customer was a company or an individual.

The position of the PTA

The PTA points out that GR and infrastructure companies other than Míla are not subject to obligations. Nor is Míla subject to price control obligations on fibre-optic products on the relevant markets but is subject to obligations for copper connections. Míla has published a reference offer that contains price for copper connections on the relevant wholesale markets on which consultation was conducted before the PTA endorsed the reference offer with a decision. The proper place to make comments on pricing and the content of products subject to obligations is in such consultation, and the PTA encourages Vodafone to exercise this right

when such consultation on a reference offer is next conducted, if the company sees a reason to comment. In the case of cost analysed prices, a difference in pricing must be based on underlying costs, but as previously stated, this only applies to copper local loops.

Míla pointed out, in connection with paragraph 167, which includes the PTA assessment that standard Internet connections on the one hand and high-quality connections on the other are considered to belong to separate markets, that the P2P Ljóslína that companies purchase from Míla and the fibre-optic lines to mobile phone transmitters are technically the same product. According to explanatory notes from the EU Commission it was proposed that fibre-optic lines to mobile phone transmitters should be defined on Market 4 (previously Market 6) or as a separate market (see page 51 in EU explanatory note). Míla emphasises that all P2P fibre lines that did not connect to PON/ GPON belonged to the same market. Míla pointed out that the Míla products called Ljóslína were not mass-market products. If one considered the market in context, then the chain was: local loop, bitstream and so retail. In the case of fibre lines, these were not bitstream and retail was conducted in the form of high-quality service.

The position of the PTA

The PTA has taken into consideration these comments and in the additional consultation that was opened on 30 October 2020, the PTA describes its changed position on Ljóslína being designated as part of Market 4, and not as part of the local loop market. Reference is made to chapter 5 in Appendix C for further discussion on this issue.

3.2.4 Distinction between standard broadband access provided at a fixed location and wireless service

Míla says that in the PTA preliminary assessment it was stated that wireless connections in this country were very few and, on the decline, and that it was therefore unlikely that fixed wireless connections belonged to the same market as fixed line connections. In any event, this was such a negligible number that they had no significance in connection with analysis of Markets 3a and 3b.

In Míla's opinion, the PTA preliminary assessment of the impact of wireless technology on Markets 3a and 3b was in many respects flawed and misleading and did not reflect the true status of the solutions that were on offer on the market today and that were considered substitute products for fixed line connections, or at least would be considered that during the lifetime of the analysis.

The PTA preliminary assessment of use of wireless access technology appear to be limited to an assessment of the number of users of older technology that had been developed before the advent of modern mobile network technology, 4G and 5G, and that was disappearing from the market. The PTA furthermore totally ignored the fact that today, solutions were being used by mobile phone network operators that were directly intended for households, summer dwellings, and even for companies and that replaced fixed line service. Some companies, such as Nova, offered mobile network technology as future connections for households and companies. That company was now offering 5G connections in the Westman Islands. Similar mobile network solutions (FWA) were also being offered by Telenor in Norway and by other

mobile phone companies in Europe, even within large cities. During the first quarter of 2020, 38,000 users had been connected and one month later there were 46,000 customers along with 1500 corporate connections.

Expectations of the public and of the authorities were high for the next generation of mobile technology, where this technology was expected to provide comprehensive data transfer service to homes and companies, along with connections to Internet connected devices. As is stated in the consultation document, allocation of frequency licences B3600 and D3600 is now in progress for 5G service to mobile network companies. There one could also find the conclusions of the consultation on requirements for distribution:

General requirement: The service area of 5G service, should cover 30% of the population and at least 40 5G transmitters should have been erected and activated by 31 December 2021.

Special requirements: A 5G network shall be built in one urban kernel from each size category, which covers at least 95% of the inhabitants of the urban kernel and which provides a minimum of 500 Mb/s average data transfer speed by 31 December 2021.

One cannot understand this in any other way than to mean that within the lifetime of this analysis a wireless connection would be on offer to 30% of the country's inhabitants, which would have a higher performance than for example the Míla wired xDSL solution that was on offer in most of the urban kernels specified in the conclusions to the consultation. This could have a significant impact on the Míla position on the market for xDSL solutions.

In addition to this, it is appropriate to note that in the planned amendments to electronic communications legislation, universal service would no longer be tied to a specific technology. This indicated that it was the wish of the authorities that technology other than that in use today could completely replace wired access networks to households and companies and that parties other than Míla could meet the needs of households and companies for data transfer service. The PTA should furthermore take this into account when assessing development of the relevant market and the company's position on Markets 3a and 3b.

In the Analysys Mason report there is also a discussion on wireless connections. It is maintained there, that 4G and 5G could be options instead of copper connections and could encourage competition on the market for lower speed connections. It is furthermore stated that paragraph 184 in the analysis is misleading because although the removal of 3.5 GHz frequency licences reduced the participation of certain providers of fixed wireless access service, this would in reality mean that a better wireless access would be provided with 5G technology on 3.5 GHz.

The position of the PTA

The PTA cannot accept that the Administration's analysis of the share of connections over a Fixed Wireless Access (FWA) network in the market is incorrect, among other things with respect to the negligible impact of such technology on the service offer and, on the demand-side on the relevant markets. This technology has first and foremost been used in the countryside, where there has not been a good Internet connection, neither through a fixed network or mobile. It did not prove an easy matter to provide such service over an open frequency range, as proved to be the case in the case of the electronic communications company, eMax ehf., and that company was eventually taken over by Vodafone and

subsequently the service was replaced in phases by a traditional mobile phone network solution like 3G and 4G or by fibre-optic.

Today it is first and foremost Gagnaveita Suðurlands ehf. that provides FWA service to specific households and places of work in South Iceland, and in the south-west corner of the country. The service is provided over the 3.6 GHz frequency range on the basis of frequency licences tied to limited areas and that are in force until 1 September 2021. It is not certain what will become of the service at the end of this licence period, as this frequency range is now defined as for use for 5G service, see frequency licence A3600 which has not yet been allocated, among other things because of current use by Gagnaveita Suðurlands ehf. of the frequency range. At the end of 2020 there were only 274 such connections in total, as compared for example to the end of 2017 when they were 1,294.

The Mila reference to the decision by Telenor in Norway to provide mobile phone service through a fixed network connection point is not a valid comparison, as that solution is not based on FWA technology, but rather on a solution called Fixed Mobile Broadband (FMB). In the case of Telenor, the company had decided to decommission copper local loops, at least in some areas. Instead, the company had offered data connection over its mobile network for reception through a fixed network point. When the PTA opened consultation on the preliminary draft, no plans had been announced by Míla for the decommissioning of the company's copper local loop network, and the notice for such a measure to come into force is 5 years, unless agreement is reached with service providers on a shorter period. In the autumn of 2020, Míla did however announce such plans for the next 10 years, but they were bound by significant reservations and were very general plans at this stage. Such a measure by Mila would therefore in all likelihood not be implemented during the lifetime of the analysis, to any significant degree. In this connection it is also appropriate to mention, especially with respect to the Telenor FMB solution, that it is now established that this is not considered a substitute product on Markets 3a and 3b, according to a recent ESA opinion dated 23 July 2020 on amendments by the Norwegian NRA Nkom to obligations on the relevant markets in connection with the company's action.

The PTA considers there to be a reason to correct the information that Míla refers to with respect to the Administration's recent allocation of 5G frequency licences to existing 4G licence holders, i.e., Siminn, Nova, and Vodafone. In its submission, Míla refers to specific requirements that relate to frequency allocations that were named in the consultation document. These requirements were however changed when processing submissions from stakeholders, as can be seen in the conclusions to the consultation.³ In this way, one criterion allowed for distribution to 25% of the population by the end of 2021 instead of 30%. The requirement for speed was reduced from 500 Mb/s down to 200 Mb/s.

The PTA considers it more appropriate to speak of *guidelines* for 5G service rather than requirements for licence rights holders, as the above specified numbers are not mandatory in the sense that the licence rights holder is obliged to achieve them. The guidelines are set as metrics to indicate what is considered to be efficient use of frequencies during the period covered by the frequency allocation. The guidelines furthermore constitute a certain incentive

-

³ See conclusions of consultation:

https://www.pfs.is/library/Skrar/Samrad/Ni%c3%b0ursta%c3%b0a%20samr%c3%a1%c3%b0%20um%20%c3%bthlutun%205G%20t%c3%ad%c3%b0niheimilda%20(03).pdf

for development, as the PTA has announced that those licence rights holders that meet the guidelines will have their frequency rights renewed at the end of the current frequency allocation. If the guidelines are not met with respect to specific frequency licences, then they will be part of a public and open allocation process at the end of the frequency allocation period.

In the autumn of 2020, the PTA sent mobile phone companies a questionnaire about their distribution plans for 5G and about the potential impact of such technology on the market here under discussion. The simple truth is that the answers were very general, short and did not provide the PTA with much of an insight into the companies' future plans in this area. Among other things, reference was made to delays because of COVID-19 and the possible government ban on equipment from a specific manufacturer registered outside the EEA. The plans of those companies with respect to 5G development are therefore subject to significant uncertainty, which makes it difficult for the PTA to make a projection of this development for the lifetime of the analysis.

Taking the above into account, the PTA believes it is not possible to assume, as Míla does, that 30% of the population will have access to 5G service during the lifetime of the analysis. The outlook is not auspicious with respect to the manner in which 5G networks and offer of service will develop. Initially, that is to say during the next 2-3 years, the PTA believes that 5G service will first and foremost mean increased data transfer speed and in addition to this, the 3.6 GHz frequency range will be used to fill in the gaps in areas under pressure that are calling for increased bandwidth to maintain good (adequate) speed. New 5G service items that require significant bandwidth, very short ping times and very little jitter, will not in the opinion of the PTA arrive during the lifetime of this market analysis. This will be further complicated by uncertainty on the revenue and business model that will support such services, among other things with respect to division of revenue between network operators and the various service providers that offer service on the network, including potential verticals (VSP) that provide specialised service e.g., for controlling self-driving vehicles or in the health service. In addition to this uncertainty that in general applies to 5G development at world level, there is the added plan of the Icelandic authorities to impose limitations on the type of 5G equipment that will be authorised for use in this country. Such limitations can delay or restrain 5G development in line with the degree to which limitations increase in number and become stricter.

According to all of the above, it is the opinion of the PTA that high-speed mobile network service, whether it is 4G or 5G, will not become a substitute product during the lifetime of this analysis. A consumer survey commissioned by the PTA in October 2020 did not alter this assessment.

The Westman Islands is the municipality in this country that enjoys the fastest and most distributed 5G service when measured by proportion of population. This does however not appear to result in the municipality not seeing a need for fibre-optic rollout to the municipality's households and places of work, as in the summer of 2020 a decision was made to commence the first phase of fibre-optic rollout for the municipality. The following is stated on this issue in minutes of a municipality council meeting: "The town council is unanimous that there should be no further delays to fibre-optic rollout in the town, as this is part of the infrastructure that is good to have in place in order to make the employment sector more

varied with increased innovation and entrepreneurship."⁴ This decision by the Westman Islands town council strongly supports the PTA conclusion that 5G service has not, at least not yet, become a substitute product for high speed data transfer service over a fixed network. Mila has also recently announced its plans to start fibre roll-out in Vestmannaeyjabær in the year 2021.

In October 2020, the PTA gathered information from Nova about the status of the company's position in the Westman Islands. There it was stated that the company had at the beginning of 2020 [...] subscriptions for 4G and [...] 4G/5G subscriptions in October 2020, and that the company commenced 5G service in that municipality in the spring of 2020. During this period, [...] subscribers had discontinued this service. One can assume that spaces that can be connected in the Westman Islands are about 1,950, which means that this is not a high proportion of the total, i.e., about [...]%.

Siminn pointed out that the PTA excluded Internet service through mobile phone systems, such as 4G or 5G service, although the service in question could return better performance and faster than the service through copper was capable of. This instance is yet another example of a lack of investigation by the PTA. It was established that the PTA had not conducted any investigation on these issues, and Siminn pointed out for example, that Nova offered 5G service in Reykjavik and in the Westman Islands and 4G service widely at other locations. Vodafone also widely offered 4G service, as does Siminn, and all of the companies offered unlimited Internet through mobile phone systems.

The connection with a household could be through a mobile phone system or through a fixed line. In both instances the connection needed to reach into the home. This means that a fixed line connection that connected to other households was thus not a substitute service and in the same manner, a mobile phone transmitter that did not reach the household in question was not a substitute service.

Nova assumed, for example that there is substitutability between Internet service through fixed line and through a mobile phone system, but the PTA ignored such fundamental issues.

It was clear that the PTA had not conducted the investigation necessary to define markets and the PTA draft was thus completely inadequate. As this was a case of looking to the future, it would have been a key issue to evaluate the significance of 5G for the market.

The position of the PTA

The PTA refers to the detailed answer here above to an analogous comment from Míla. To this it can be added, the PTA is not aware of Nova having asserted that such substitutability existed. In any event, it is the assessment of the PTA that consumers do not see Internet service through a mobile network system as a substitute for an Internet connection through a fixed network, but rather as an additional service. Advertisements by parties about the

⁴ See minutes of Westman Islands town Council meeting from 11 June 2020: https://www.vestmannaeyjar.is/stjornsysla/stjorn/fundargerdir/DisplayMeeting.aspx?id=0863727220524396655
91&text=

benefits of their own products are first and foremost of a promotional nature and cannot automatically become a basis for PTA assessment of potential substitutability.

Míla points out, with respect to paragraph 179 in the preliminary draft, that at many locations where decommissioning of copper has commenced to some extent, FWA is used and instead of wireless connections, 4G/5G is used. In such cases, aerials are fitted to buildings, to increase stability of connections, but in other respects the indoor cabling is the same as in the case of normal fixed line connections. One can expect such service to establish itself here as elsewhere. A good example of such service can for example be found in Norway. Such service can offer greater speed than Ljósnet service and can be comparable to existing fibre-optic service.

The position of the PTA

The PTA agrees that this is technically possible, but against this there is the fact that it is still unclear what impact 5G will have when rollout of that service begins in earnest. The PTA has come to the conclusion that up to this point in time, there is no substitutability between mobile phone network solutions and fixed line network solutions. Pricing and included service are in many ways not comparable between mobile network and fixed network services and consumers appear to perceive mobile network connections as first and foremost an addition to the household's fixed line connection. In other respects, reference is made to prior answers. In Norway, it is the party with SMP, Telenor, that has followed this route.

Míla refers to paragraph 185 by noting that it is appropriate to point out that in the Nova service offer one can find package solutions that users can receive over fibre-optic or over mobile network, that are not on offer over copper connections. One can also point out the following text from the minutes of a Westman Islands town council meeting. "The mayor furthermore provided information about his and two town managers' meeting with representatives of Nova on what is called 5G rollout, which greatly increases data transfer capacity and speed in the Westman Islands. The company intends to locate transmitters at various locations in the Westman Islands in the future and thus to offer a greatly improved electronic communications status for companies and individuals. The company already has two transmitters that are fibre-optic connected and where the intention is to take them into service, but fibre-optic has to be deployed to new transmitters that will be located at many places on the island when the network will be made denser." The Westman Islands municipality therefore appear to consider that wireless connections have significance for users of broadband connections at that location.

The position of the PTA

In addition to the previous answer on the Westman Islands, one can point out that the town authorities in the Westman Islands published an advertisement in June 2020, which called for expressions of interest in the development of a fibre-optic access network in the

municipality⁵. One can therefore hardly conclude otherwise than that the municipality does not plan to rely on mobile phone solutions being able to provide substitutability for fixed network solutions, when it comes to high-speed broadband service for the inhabitants of the municipality. In addition, Mila has recently announced that the company intends to start fibre roll-out in the town in the year 2021.

3.2.5 Definition of the relevant service markets at retail level

GR agreed with the PTA that Internet connections for the home and for small and medium size companies and institutions have the same or similar characteristics and can therefore belong to the same market, that was possible to provide both over fibre-optic and copper. Large companies and institutions that had a need for specialised solutions and high quality, speed and special solutions belonged on the other hand to a separate market, and this group was relatively small in this country.

The position of the PTA

The above comment from GR supports the position taken by the PTA, that Internet connections for households and small and medium size companies and institutions have the same or similar characteristics, and should therefore belong to the same market, regardless of whether the transport layer is a copper network or fibre-optic. The PTA is now working on an analysis of the market for high-quality solutions. These issues will be dealt with further there.

Míla refers to paragraph 192 in the preliminary draft and considers that the conclusion that the retail market for standard broadband access belong to connections with xDSL technology and fibre-optic connections, but not wireless connections, was reached by looking backwards and not forwards as the Administration is obliged to do, pursuant to the ESA recommendation and the electronic communications regulatory framework. Míla considers that fixed wireless connections over mobile networks will be far more widespread in the coming years with the arrival of 5G. It is clear that Nova has commenced a market campaign in this tone and one can expect that the mobile phone companies will do the same. Because Iceland is so sparsely populated, such technology could offer each user much more bandwidth than in more densely populated countries.

The position of the PTA

The PTA refers to its previous answers on the lack of substitutability between mobile networks and fixed networks and to the uncertainty that exists with respect to 5G distribution and service offer. If there should be significant development and take-up of such networks at the cost of fixed networks, the PTA will promptly conduct a new analysis of the relevant markets.

⁵ Advertisement from Westman Islands municipality, 4 June 2020. https://www.vestmannaeyjar.is/mannlif/frettir/ahugakonnun

3.2.6 Competition in retail markets

Nova refers to paragraphs 196 to 199 in the preliminary draft and indicated the very detailed discussion on bundles presented in the Competition Authority Decision no. 25/2020, where the very strong position of the Siminn Group is recounted. Nova also agreed with the PTA that effective competition was not in place in the retail markets in question.

The position of the PTA

The PTA came to the conclusion in the preliminary analysis that there was not efficient competition on the relevant retail markets despite wholesale obligations that rest on Míla, and that is endorsed here by Nova.

Míla refers to paragraph 195 in the preliminary draft and says that it is established that there will not be a single network with national coverage during the lifetime of the market analysis and in fact that it is no longer in place or in use. Plans for decommissioning the copper network are in place that will be implemented in large regions during the lifetime of the analysis. Míla further points out that obligations also rest on Míla from the Competition Authority that the PTA appears not to take into account in its analysis.

It is remarkable that there are other figures here on distribution and market share of GR and Míla than in paragraph 678 of the preliminary draft. This is fundamental information and Míla must expect that accurate figures are used in the analysis. Míla would like to know whether the figures are correct.

The position of the PTA

The PTA refers to previous answers on annual updating of data and areas where lighter obligations will apply.

Inconsistencies in the numbers will be examined and corrected as appropriate in the revised analysis (Appendix A). Given the published plans from Míla, from the autumn of 2020 on the decommissioning of copper during the next 10 years, the PTA does not agree that there will be significant decommissioning during the lifetime of the analysis. Míla allows for the lifetime being until the end of 2026 part, the PTA considers that it will be at the most until the end of 2023. Míla will also in the opinion of the PTA, first and foremost decommission the copper network where the company has rolled out fibre-optic and/or where the company has ensured the use of fibre-optic networks owned by a third-party. The decommissioning of the copper network will furthermore not lead to Míla being without connections in any area, to any significant degree, during the lifetime of the analysis.

Míla comments on paragraphs 195 and 196 in the preliminary draft and points out that the Siminn market share increased only by about 1.4 percentage points between 2018 and 2019. The most likely explanation is that Vodafone appears to have made a wrong move in the merger with 365. On that occasion, a number of 365 customers switched to other service

providers including Siminn. Vodafone has now launched a new campaign and will therefore probably regain its position. Míla considers it unlikely that the Siminn market position will continue to grow, particularly when one takes into account the fact that Míla fibre-optic rollout has slowed down, as the most expensive areas now remain in the Capital City Area.

The fact that two other companies have developed fibre-optic networks reaching about 80% of the households in the country appears not to have been sufficient reason to reduce obligations on Míla, but to the contrary, to increase them. The fact that Míla has lost about 20 percentage points in market share between market analyses leads the PTA to increase obligations on Míla. Míla objects to these PTA methods of working, which seem not to take into account Icelandic circumstances where Míla is competing in the main urban areas with high-speed networks on fibre-optic, with VDSL connections over copper which it is clear that consumers do not consider to be a substitute product, as the PTA figures show, and Míla's own figures, that people switch in large numbers from VDSL when fibre-optic is deployed to their house.

The position of the PTA

The PTA is extremely surprised that the above specified comments from Míla. Here, and in many other places in the analysis, where there is discussion on the Siminn position, Míla appears to take the side of its owner, Siminn. This is inconsistent, in the light of obligations on Míla for non-discrimination between external and internal parties. Míla consistently makes little of the Siminn position and of Síminn's possibilities for the future.

The PTA considers that it has not seen any indications that indicate that Vodafone will strengthen significantly during the lifetime of the analysis, although the PTA does not of course, exclude anything in this respect. Now Siminn has made an agreement on entry into the GR fibre-optic network and the PTA considers that this will, all things being equal, strengthen Siminn's position at the cost of service providers already on that network, and Vodafone is one of those parties.

Then Míla asserts that the company's fibre-optic rollout has slowed down. Given the figures for recent distribution and the plans for the coming years, the PTA cannot see that Míla will slow down in its fibre-optic rollout during the lifetime of the analysis. The company's plans are much more ambitious than those of competitors and for this reason the PTA considers that the gap will lessen between Míla on the one hand and its competitors on the other during the lifetime of the analysis with respect to distribution of fibre-optic networks. With increased distribution of Míla fibre-optic networks, one can also expect an increase in active connections on the company's fibre-optic network.

The PTA has for this reason, announced its amended plans for obligations, particularly with respect to price control, in the additional consultation that started on 30 October 2020. Comments on that are answered in the relevant document, Appendix C.

Míla points out that paragraph 197 in the preliminary draft is in all likelihood unneeded as it is precisely the same as paragraphs 195 and 196.

The position of the PTA

The PTA thanks for this comment and will revise this in the final version of the revised analysis (Appendix A).

Analysys Mason stated that the PTA analysis focuses too much on market development during the last 5 years and does not focus adequately on the future. During the period 2021-2026 there will be a special market for fibre-optic connections as: Consumer uptake of fibre-optic, where it is available, is very significant and such connections will constitute a large majority during this period. Because consumers rather choose fibre, there will not be competitive pressure from copper connections. There are also plans for decommissioning the copper system.

The position of the PTA

The PTA assessment is that there is substitutability between copper networks and fibre-optic networks and that sufficient competitive pressure is in place. When the Míla copper system will be decommissioned and when newer Míla networks and/or those of others replace it, this development will be addressed, and it will be taken into account in the annual collection of data for municipalities where lighter obligations will apply. The estimated lifetime of the analysis is furthermore at the most until the end of year 2023 and not to the end of the year 2026.

Analysys Mason, stated that the PTA does not present sufficiently clear projections on market development. Reference is made to paragraphs 549, 1234, 1252 and 1590. The PTA declarations are not presented in a clear manner in the form of statistics. It would be better to present separate projections on development of number of lines by type and market share, as this would give stakeholders a better understanding of the PTA conclusions and would give them a better opportunity to present their view of likely market development.

The position of the PTA

The PTA considers it to be problematic to make precise numeric projections at this point in time, as there are very many imponderables that must be taken into account and then there is the fact that the market is now in a significant development phase. It proved difficult to gather adequate data from electronic communications companies, among other things from Míla on plans for fibre-optic rollout during the coming years and plans from mobile phone companies for 5G development. The decommissioning of the Siminn PSTN service and of the Míla copper system have been on the table for a number of years and have been postponed for a variety of reasons, most recently due to Mila's takeover of various system components from Síminn at the turn of the year 2020/2021. Síminn, however, seems to be aiming to complete the decommissioning of the PSTN system by the end of 2021.

Instead of this, the PTA has provided more detailed information on its plan for annual revision of the list of municipalities where lighter obligations will apply. The PTA also reiterates that it has not been easy to get information from Míla, which is the largest company on the relevant market in this country, on its distribution plans for the coming years. The PTA will however

endeavour to add text in the revised analysis (Appendix A) as appropriate with regards to possible future development with respect to the various issues. One can furthermore find widely in this document (Appendix B) PTA answers to comments from the Siminn Group, where the PTA endeavours to make projections on possible development with respect to the various issues. Reference is furthermore made to this. Mila finally sent the PTA its roll-out plans until end of 2023 in mid June 2021, after the drafts had been sent to ESA for informal consultation

Siminn says that it is remarkable that in the PTA analysis, the competitive situation was specified and announced before definition of the markets was made, whereas this should have been the other way round.

The position of the PTA

The PTA begins its analysis with an overview of the retail market and identifies competition problems that it would be possible to remedy with appropriate obligations on the underlying wholesale markets. Then the wholesale markets are defined geographically and with respect to service, and then analysed, before competition problems are described and obligations elaborated. This is completely consistent with recognised procedure in market analysis.

4 Definition of wholesale markets

Siminn refers to rules on definition of markets, including in competition law, in the notice from the EU Commission on definition of markets from 1997 and in the Commission guidelines on implementation of market analysis from 2018.

This was the most important step in the analysis, as a wrong analysis could lead to a wrong conclusion on the status of companies on the market and thus on what were appropriate obligations to apply in response to circumstances on the relevant market. The key issue in analysis of markets was to identify competitive restraint.

It was clear that the PTA had not in any way conducted the investigation that the Administration was obliged to conduct according to the law and had thus based the alleged analysis first and foremost on guesswork. Simin pointed out that the PTA could not avoid making an investigation by applying so-called rules of proof instead of investigation, see page 516 in the publication by Páll Hreinsson: *Administrative law — Case procedure*. In this way, the PTA seems to apply rules of proof in many instances, instead of investigating the case in an adequate manner.

The PTA list of data proved that the Administration had not gathered sufficient data to investigate the market.

Siminn challenged the PTA to make a real investigation of the markets and to assess markets with respect to demand side substitutability. There was no data on which the PTA definition was based, i.e., no information about whether e.g., Kapalvæðing operated on the same market as Míla in Reykjanesbær, but instead it was simply asserted without data that this was not the case. There was no information provided on substitutability between fibre-optic and xDSL solutions, i.e., whether there was a break in the chain of substitution. In addition to this there was no actual assessment made on whether 4G service was part of the same market, or whether 5G service could provide competitive restraint so that it could be deemed to belong to the same market.

The PTA market research basically does not exist, and it needs to be conducted. Siminn challenged the PTA to collect such data.

The position of the PTA

The PTA considers that the Siminn assessment of the investigation of service markets is incorrect. The PTA had access to many kinds of information which were used in delineating a service market, with respect to substitutability while making the preliminary assessment. Subsequent to consultation on the preliminary assessment, the PTA has also gathered further data which supports the PTA assessment of substitutability, among other things, responses from electronic communications companies to the detailed PTA questionnaire and to the consumer survey commissioned by the PTA in the autumn of 2020.

The PTA had among other things, gathered data from electronic communications companies on distribution of high-speed networks and on plans for their further development, along with data on use of varying access networks for Internet connections, broken down by municipality. This information gives a good picture of the nature of supply and demand. Among conclusions one can draw from the statistics is the conclusion that copper networks still compete with fibre-optic connections. This can for example be seen by the fact that a proportion of users choose to retain connections through copper network despite the fact that access to a fibre-optic network is almost 100% in the areas in question. One could name for example Reykjavík, Seltjarnarnes, Kópavogur, Garðabær, Hafnarfjörður, Mosfellsbær, Akranes and Hveragerði, as in these municipalities the share of copper connections in use at the end of 2020, was in the range 19-42% despite the fact that almost all users in these municipalities had the possibility of a fibre-optic connection. The PTA considers that the presentation of the information used as grounds could be improved, as could the conclusions that were drawn from this information, and the PTA will revise the analysis (Appendix A) with this in mind.

The PTA bases its assessment on well-known facts on characteristics and capacity of varying technical solutions for Internet connections. Such information is available to everyone and the capacity of each technical solution is therefore clear. The PTA gathered precise information from electronic communications companies on the types of connections in use in this country and on the number of connections of each type. Having gathered this information, the PTA could then draw the conclusion that the varied offer of xDSL solutions and fibre-optic connections formed a sufficiently continuous chain for there to be every likelihood that there was a chain of substitutability and there was no visible breach in the chain as most types of xDSL solutions are on offer in this country, including VDSL with vectoring. This is different from the situation in Sweden where there is little high-speed xDSL and for this reason it was considered that there was a breach in the chain of substitutability in that country.

Further grounds were the available facts on marketing and pricing of Internet connections. It is established that in marketing at retail level there is no distinction made between fibre-optic connections and copper connections. Copper connections are marketed as a completely adequate option to provide access to all network connected services for normal consumers. At wholesale level, VDSL connections over copper network are presented on the Míla homepage in the following manner:

"Míla Ljósnet

Míla offers Ljósnet connections to almost all urban households in the country.

The speed offered by Mila on Ljósnet is up to 50-100 Mb/s and it is possible to have up to 5 set-top boxes for TV service, and adequate speed for all household use.

Míla Ljósnet is based on what is called VDSL technology where fibre-optic is deployed to the street cabinet and from there a copper line is used for the remaining metres."

In Siminn's answer, dated 25 September 2020, to the PTA question on whether there was any difference in marketing, Internet service, depending on whether it was provided over copper or fibre-optic, it was stated that Siminn had discontinued the policy of mentioning the transport layer in marketing messages. On the other hand, they tried to upgrade customers that were on copper and had the option of fibre-optic.

The PTA considers there to be no question that a connection that had adequate speed for all household use could exert competitive restraint on fibre-optic, even though the latter had higher speed.

Pricing of Siminn and Vodafone is the same to end users, independent of whether the transport layer is copper or fibre-optic. The retailers who do distinguish between them in price have a pricing policy based on speed and one does not see a jump in price between copper connections based on VDSL2 and fibre-optic connections.

General practice within the EEA is such that copper and fibre-optic connections are deemed to belong to the same market. The PTA is not aware of any formal market analysis in force in the EEA that has come to the conclusion that there is no substitutability between these technical solutions. PTS in Sweden did however come to this conclusion in its draft market analysis in 2019. Circumstances there are different from in Iceland, see discussion in Section 4.1.1 here below. It should however be noted that PTS retracted its draft market analysis at the beginning of 2020 because of objections from the EU Commission related to the lack of detailed geographic analysis. There is no decision in force in Europe, where the conclusion has been reached that there is no substitutability between copper and fibre-optic. This practice within the EEA is a strong indication that copper and fibre-optic local loops belong to the same market. The PTA has acquainted itself with analyses in all EEA states and considers that the general policy to be found there supports the PTA conclusion.

The PTA had access to the above specified information when making the preliminary draft and one must consider this to be an adequate investigation, as it is in accordance with the analytical work performed by the PTA in prior market analysis. It is therefore not correct that the PTA had tried to use rules of proof as grounds rather than investigation.

In order to make concessions to the comments from stakeholders, particularly from the Siminn Group, the PTA gathered further information on various issues which will be discussed in the revised draft analysis (Appendix A) in this document, and in the following sections of this document as appropriate. The information that was gathered did not change the PTA assessment with respect to substitutability between copper and fibre-optic local loops.

The PTA has seldom conducted consumer surveys in connection with market analysis and no decision made by the Administration has been rescinded because of a lack of such a survey. The conclusions of the consumer survey were among other things that the speed of the connection was not the most important factor in consumer choice of Internet connection and furthermore that a large proportion of consumers was prepared to switch from fibre-optic to Ljósnet (VDSL) if the price of fibre-optic service increased by about 10%. The conclusions from this survey will be discussed in more detail in the revised draft (Appendix A) and in Appendix C, where there will be discussion on the conclusions of the additional consultation opened by the PTA on 30 October 2020, as the PTA considers that the conclusions strongly support the PTA assessment of substitutability that was presented in the preliminary draft.

One must keep in mind that what is called the SSNIP test, i.e., to investigate how consumers react to a small but non-transitory price increase, has limitations and is only one method of many for investigating substitutability. On this issue, reference is made, among other things

to pages 6 and 7 in the EU Commission guidelines on market analysis and to pages 10-11 in the explanatory note to the guidelines.

4.1 General

4.1.1 Market analysis according to the Recommendation and its Guidelines

Míla makes comments on paragraph 208 in the preliminary draft where the PTA notes that, according to the EU Commission Guidelines on the relevant markets, analyses in the EEA had not demonstrated a breach in the chain of substitution between broadband connections over copper and fibre-optic and that it was therefore generally considered appropriate to regard them as part of the same wholesale market.

Míla states that market circumstances in Iceland differ in many ways to those in EU countries. Míla considers that there is no instance of such wide distribution of fibre networks as in Iceland and furthermore that nowhere is such a high speed offered as in this country. Míla considers therefore that the EU guidelines from 2014 do not sufficiently take into account circumstances that pertain in Iceland. Míla pointed out that in the Swedish market analysis from 2019, the PTS had come to the conclusion that broadband connections on copper and fibre-optic were on different markets. The main reason had been a hypothetical monopolist test, and a survey had been conducted among customers. The PTA had neither conducted an SSNIP test in this country and nor had it conducted a survey for the market in this country. Míla considers that this on its own suffices to invalidate this analysis.

The position of the PTA

It is true that distribution of fibre-optic is greater here in this country than in most EEA states. This does however not change the fact that the characteristics of varying technical solutions for Internet connections are comparable in all locations, as these are standard technologies. Local circumstances can however have an impact on the quality of connections. There is nothing to indicate that consumer needs are different in this country than in other EEA states, and most technical solutions on offer here meet those needs. In this connection one can refer among other things to the consumer survey commissioned by the PTA, subsequent to consultation on the preliminary draft analysis.

With respect to the draft analysis in Sweden in 2019, one must keep in mind that the offer of powerful connections over copper network in that country is much less than here. According to the discussion on page 45 in the PTS analysis of Market 3a on copper network⁶, it is stated that only 20% of users have access to VDSL. The average VDSL speed in Sweden is 27.5 Mb/s. The majority of users in Sweden thus only have the choice on the one hand of connections over copper network with rather low speed and on the other hand, of fibre-optic connections and cable connections with high speed. There is therefore much more reason to

⁶ Utkast till beslut om marknaden för lokalt tillträde till kopparnät enligt 8 kap. 5 och 6 §§, lagen (2003:389) om elektronisk kommunikation, 2019-05-22 Dnr: 15-7200. https://pts.se/globalassets/startpage/dokument/icke-legala-dokument/remisser/2019/telefoniinternet/3a3b/utkast-till-beslut_marknad-3a-koppar_dnr-15-7200_190522.pdf

consider there to be a breach in the chain of substitutability of Internet connections in Sweden than in Iceland, as VDSL service is very widespread and much more variety in performance of connections. For this reason, the PTA considers that referring to special circumstances in Iceland rather supports the PTA conclusion on the existence of a chain of substitutability between xDSL and fibre-optic solutions, than contradicts it.

4.1.2 Boundary between the wholesale market for access provided at a fixed location and central access and wholesale market for high-quality access

GR says that there is a close connection between Market 3a and Market 4 with respect to fibre-optic local loops/lines, as stated in the draft. Míla has also pointed to this fact, as can be seen in the PTA Decision no. 24/2017. In the draft it is stated that the PTA considers now that Ljóslína belongs to Market 3a and furthermore announced that price control obligations would be imposed both on copper and fibre-optic connections on that market. GR is very happy to hear this. In the opinion of the company, there was considerable overlap between these two markets, and it was not feasible to separate them, particularly in the light of the fact that up to this point in time there had been varying obligations on these two markets. It was important that a company with SMP could not avoid obligations that had for example been imposed on one market and not the other.

In the light of the fact that a case had arisen, where Míla had interpreted various decisions by the PTA in another manner than the Administration itself, GR wish to point out that the PTA discussion, to the effect that Ljóslína was now considered to be part of Market 3a and not Market 4 (previously Market 6), could be found in Sections 10.2 and 11.2 on competition problems in Markets 3a and 3b and that the description of obligations in Sections 10.7 and 11.6 might be clearer.

The position of the PTA

Míla made comments to the effect that Ljóslína were not part of the general access network on Market 3a. The PTA took the location of this service for examination as a result of that comment. After giving this consideration, the PTA came to the conclusion that Ljóslína did not belong to Market 3a as they are generally deployed in the same investment projects as the other public local loop network, that is deployed in the comprehensive network in Míla fibre-optic rollout. They are still dependent on a special order and as appropriate, only deployed against a share of start-up costs. The PTA therefore considers it appropriate that they continue to belong to Market 6, i.e., terminating segments of leased lines and will in all likelihood become part of Market 4 pursuant to the recommendation from 2016, and this analysis is now being made by PTA. There will be further discussion on this later in this document, and in the revised market analysis (Appendix A).

The PTA has furthermore decided not to apply an obligation for cost analysed prices on fibre-optic local loops that are a part of Market 3a and to prescribe instead an ERT obligation. The problem that GR considers could exist with respect to corporate connections, where a company would try to avoid obligations by having an unclear distinction between product offer on Markets 3a and 4, must be handled in another manner if it proves to exist. In this connection one can monitor whether products that are to belong to Market 4 are in reality

priced as such and furthermore the Competition Authority has the authority to take action in the event of under-pricing of corporate connections.

Míla comments on paragraphs 215-218 in the preliminary draft, which discusses the distinction between wholesale Markets 3a and 3b on the one hand and the wholesale market for high-quality access (Market 4) on the other. There Míla says that it is not specified to which market dark P2P fibre for high-quality connections belonged. Here there was only discussion on connections that needed active equipment to provide service. The question, which has not been answered, is whether the product Ljóslína was on M3a or M4. In other countries, such a product was on M4, but the PTA apparently intended to have the product on M3a, which was in contradiction to what other European countries had done. It was also unclear where company connections should be located (xDSL/GPON+)

The position of the PTA

As stated here above, the PTA has reviewed its position on the location of Míla Ljóslína (P2P fibre-optic for high-quality connections) on a service market. The PTA will explain this in more detail in the revised draft analysis (Appendix A). With respect to corporate connections, the PTA considers that it is stated in the preliminary draft that Markets 3a and 3b contain procurements for standard mass-market-market service. If a company purchases such a service which is configured with the needs of households in mind and which has no characteristics above and beyond standard home connections, then the PTA considers that procurements for such service are on Markets 3a and 3b. In the same way, various mass-market solutions that are aimed at the corporate market are part of Markets 3a and 3b. If on the other hand there are connections with increased quality and/or additional service items, then their wholesale level belongs normally to Market 6, according to the older recommendation and Market 4 according to the ESA recommendation from 2016.

4.2 Assessment of various access technology for the wholesale market for local access (M3a)

4.2.1 Copper network

Vodafone refers to paragraph 221 where there is discussion on the Míla copper system and specifically agrees with physical and passive access to the copper network belonging to Market 3a. Vodafone has repeatedly requested prices for VULA from Míla and has not received them.

The position of the PTA

This comment supports the PTA definition of Market 3a. The PTA received the information from Mila that there was no demand for this product. In the PTA Decision no. 6/2017, prices for VULA were decided. In national consultation, parameters for calculation of VULA tariff were among other things published in order that stakeholders could comment on individual parts of those calculations and the parameters on which they were based. Vodafone made no

comments on the draft decision. The PTA encourages Vodafone to send comments to the Administration if the company's access to the service is denied.

It will be specifically examined in the review of the Míla wholesale tariff for the relevant market, whether a requirement would be made for a new cost analysis of Míla VULA service.

4.2.2 Fibre-optic network

Vodafone refers to paragraph 222 which discusses the Míla fibre-optic network in connection with assessment of varying access technologies with respect to Market 3a and considers that this further opens possibilities that Míla be obliged to provide local loop lease in its point-to-point fibre-optic networks. Then it would be possible to develop fibre-optic services to households from node points, similar to what was possible with copper and to create more competition and freedom.

With respect to paragraph 223 in the preliminary draft, where there was discussion on the GR fibre-optic network in connection with assessment of varying access technology on Market 3a, Vodafone considered that this opened further possibilities to oblige GR to provide local loop lease in its point-to-point fibre-optic networks and then it would be possible to develop fibre-optic services to households from node points, similar to what was possible with copper and create more competition and freedom.

The position of the PTA

With respect to the revised PTA position on Míla Ljósnet, see discussion here above, Míla will not be obliged to mass produce P2P connections for the household market. Access to such local loops was now bound by obligations on Market 6 and will be reviewed in the analysis now being conducted on Market 4 for high quality connections, pursuant to the ESA recommendation on the relevant markets from 2016.

The PTA has not imposed access obligations on GR as this is generally not authorised unless a company has been designated as having SMP. Neither the PTA preliminary draft market analysis of Markets 3a and 3b, nor the updated preliminary draft (Appendix A) does allow for GR having SMP, so the PTA does not have the authority to impose obligations on GR.

Míla also commented on the above specified paragraph 222 in the preliminary draft where it is said that GPON access is on Market 3a. After making a query to the PTA it had come to light that this was an error. Properly, it was that the PTA considered that fibre-optic with PON architecture belonged in M3a.

The position of the PTA

The PTA confirms that this was a mistake and will be corrected in the revised analysis.

Míla comments on paragraph 224 in the preliminary draft where there is discussion on fibre optic networks of smaller parties in connection with assessment of varying access

technologies with respect to Market 3a. Discussion on the Snerpa network is lacking there. That was the largest fibre-optic network in the West Fjords and would, during the lifetime of the analysis, become the only local loop network in a number of areas in the West Fjords.

The position of the PTA

The PTA has gathered further information on Snerpa operations which will be discussed in the revised analysis (Appendix A). The PTA considers that this information makes no difference to the PTA conclusions.

It is stated in information from Snerpa that the company's distribution of FTTH local loops had reached 1066 spaces in Ísafjarðarbær, Bolungarvík and in Tálknafjarðarhreppur on 1 October 2020. It is expected that they will increase by about [...] per annum throughout the lifetime of the analysis and will be about [...] at the end of 2023. Active connections on the network were 496 which makes the usage 46%. A draft agreement between Snerpa and Míla on the Míla purchase of access to dark fibre on the Snerpa FTTH network was ready in October 2020 but had not been signed. It was clear that the size of this fibre-optic network is rather small when compared with the size of the networks of Míla and GR, and even tiny when compared with the Míla local loop network nationwide through copper and fibre-optic.

4.2.3 Wireless network

Míla comments on paragraph 227-229 in the preliminary draft where there is discussion on wireless networks in connection with assessment of varying access technologies with respect to Market 3a. Míla did not consider it sufficient to only take account of how consumers perceived a service today when making a projection of how the market would develop during the lifetime of the analysis. Actions of individual electronic communications companies could have a significant impact on how the market behaves in the future, as Nova, which was the third largest electronic communications company in the country, clearly perceived mobile network service as a substitute product for fixed line. It could be clearly seen from their service offer, see e.g., the fact that the company offers mobile phone network solutions to households rather than Mila's VDSL service. The PTA asserted that technically, local loops on mobile phone networks were not possible. Míla could not see what this impossibility was, as there were technical solutions available today that used mobile network service to offer a fixed Internet connection. Miller therefore consider this assertion to be wrong and that such systems were substitutes for local loops. The systems were certainly shared, but PON systems were also shared. NKOM imposed an obligation on Telenor to sell wholesale access to such "local loops" to other electronic communications companies. Míla considered this PTA conclusion to be wrong.

The position of the PTA

With respect to substitutability between wireless solutions and fixed local loops, reference is made to the detailed discussion on substitutability at the retail level in Section 3.2.4. The PTA considers it clear that the same does not apply to wholesale level. With respect to the possibility of wholesale service through a mobile network, the PTA can accept a change of

wording such that local loop lease on mobile networks is "problematic to implement" rather than saying that it is impossible. The PTA has however not seen examples that local loop lease is offered on mobile networks. In the NKOM referenced by Mila, an access obligation is imposed on Telenor on Market 3b, which is for central access and not local loop lease. NKOM accepted that it was difficult to provide MVNO access in transmitters and therefore limited the access obligation to central access. The Telenor wireless system in question is only operated in areas where Telenor has stopped operating a copper system and the wireless system is therefore not competing with a fixed line network which means that this operation provides few indications of the substitutability capacity of the service.

GR states that in the analysis the assertion is made that neither companies nor consumers consider broadband data transfer service on mobile networks to be a substitute service for general broadband access on fixed line networks and it is unlikely that this will be the case during the lifetime of this analysis. It was stated that the PTA would pay close attention to this with the entry of 5G and would review the analysis at an earlier date than usual, should the Administration consider this to be necessary. GR agreed that it was important that the Administration did this. One electronic communications company has already announced that 5G service to households would commence in July 2020 in the Westman Islands. At the same time, the municipality in question had requested expressions of interest from electronic communications companies in deploying fibre-optic to households, but no conclusion had been reached in this case.

GR considered it important that the Administration closely monitored progress in the Westman Islands, as this development could reveal whether 5G was in fact a substitute service or not.

As is stated in the market analysis, the Míla market dominance position, was among other things in the company's ownership and broad service offer that covered the whole country. Míla competitors did not among other things, have their own mobile networks and their ability to compete on the market was limited in this respect should it come to light that 5G mobile network service proved to be a substitute service for fixed line networks. GR agrees with the conclusion of the draft that progress in 5G service should be closely monitored.

The position of the PTA

With respect to substitutability between wireless solutions and fixed local loops, reference is made to the detailed discussion on substitutability at the retail level in Section 3.2.4. The GR comment does not call for changes to the PTA analysis, as they are only emphasising what was stated in the preliminary draft to the effect that the PTA would closely monitor development of 5G service with potential future substitutability in mind.

4.2.4 Conclusion regarding definition of Market 3a

Míla commented on paragraph 232 in the preliminary draft which discusses the PFS conclusion with respect to definition of Market 3a. Míla considered that there was no chain of substitution between copper and fibre-optic. In larger areas, the chain was from ISDN or ADSL to fibre-optic and cannot be part of that definition. Circumstances vary greatly by

region, and this had to be taken into account. It was established that on Market 3a, Mila would have no infrastructure in large areas during the lifetime of the analysis.

The position of the PTA

The majority of consumers in the country have access to more types of connection than Míla lists in its comments. The PTA, after careful scrutiny, has come to the conclusion that it is not appropriate to segment the country into geographic markets. One must therefore take into account the status in offer of technical solutions as a whole, and the overall situation is that there is a normal and incremental increase in performance of the connections on offer. There is no further elaboration of the meaning of the Míla assertion that it will have no infrastructure in large areas, but the PTA feels that nothing has been said to indicate that Míla will decommission its infrastructure without having acquired a new infrastructure, except possibly in very sparsely populated areas, that do not have an impact on the overall evaluation. This comment does not alter the PTA assessment with respect to the existence of a chain of substitution.

Vodafone also referred to the above specified paragraph 232 and specifically expressed its agreement with the PTA definition of Market 3a and considered it to be an improvement on the market that all connections over fibre-optic and copper networks that fulfilled the conditions that 1) access was local and not central, 2) the lessee can choose which service he provides and that had guaranteed performance and 3) the lessee had full control of the connection, belonged to the market.

Vodafone noted that the dominant market position of the Siminn Group as a whole on the electronic communications market strongly supported that both the Míla copper and fibre-optic connections belong to Market 3a and that obligations should be imposed on Míla for the company's fibre-optic system. There had been complete substitutability at Siminn between copper and fibre, and Siminn customers were often moved between copper and fibre without knowledge or prior written agreement.

Vodafone also agreed with the definition in paragraph 233 i.e., that Market 3a should be deemed local loop lease on copper local loops, both full access and shared, and local loop lease on fibre-optic local loops, regardless of whether the topology is PON or P2P.

The position of the PTA

The Vodafone comment supports the PTA market analysis. It should however be noted that in the revised draft, the PTA does not intend to include Míla Ljósnet in Market 3a, as these are P2P lines that are deployed specially with the needs of corporate users in mind and belong to Market 6, i.e. terminating segments of leased lines, pursuant to the analysis now in force on that market and they will probably belong to the new Market 4 for high quality connections in the future, and the PTA has commenced work on analysing this market.

4.2.5 Local access on offer in this country

Vodafone refers to paragraph 234 which discusses Míla local loop leasing and wishes to point out that Míla often used the excuse that supplies had run out if Vodafone tried to get fibre-optic from a node point into a residential property. There was also the fact that the local loop price was higher in the case of PON.

In connection with paragraph 236, Vodafone asks when the starting point in time was when reference is made to 0-5 years and 5-7 years, with respect to plans for decommissioning of the Míla copper system.

In connection with paragraph 239, Vodafone emphasised that Míla had optical splitters in telephone exchanges at many locations instead of offering a local loop on a whole continuous optical fibre from the distribution frame to the point of usage, i.e., with P2P architecture, which clearly curtailed the independence of electronic communications companies in their service offer.

With respect to paragraph 240, Vodafone noted that Míla had refused to deliver Ljósnet to households, but rather forced purchase of PON.

In connection with paragraph 242, Vodafone noted that Mila had refused to give a price for VULA access.

With respect to paragraph 243, Vodafone says that it is not entirely correct that there had been no interest in the VULA solution. Prices and a presentation had been requested, but little happened. Vodafone had e.g., not known that PON was included there. Vodafone therefore asks how interconnection with Míla was structured.

Then Vodafone says, in connection with paragraph 245 that GR should offer a solution such that it would be possible to purchase a passive local loop from the node point into the home.

With respect to paragraph 248, Vodafone said that municipalities' tariffs varied. Many of them priced local loops as though they were fibre-optic between telephone exchanges, i.e., passive fibre-optic but with the same service as to homes. This was not tenable as these were state supported networks. It was a normal demand that a company like Vodafone could purchase connections into rural networks at the same prices as households on the rural networks. This was precisely the same topology in a facility as in a home. Vodafone therefore requested that general obligations be imposed with respect to this on Market 3a.

The position of the PTA

The PTA considers that obligations on access must mainly be related to Míla network topology. This means that Míla will not be obliged to provide general access to homes through P2P lines when the Míla public local loop network is based on PON topology. If, Míla is on the other hand, an operator of a network in the countryside where the topology is P2P connections to homes, then Míla is obliged to provide access to such local loops.

With regards to decommissioning the copper system, the timeframes were based on the time when information was given when preparing the analysis. The information was received in March 2020. In the autumn of 2020, Mila formally notified electronic communications

companies and the PTA about these plans. As stated in the analysis, this projection is presented with a reservation on uncertain factors.

The PTA reiterates that it is not possible to impose obligations on parties like GR, which have not been designated as having SMP.

As has previously been stated the PTA received the information from Míla that there was no demand for access to VULA. In the PTA Decision no. 6/2017, prices for VULA were decided. As previously stated, the PTA will reassess the need for a revision of the VULA tariff if considered necessary.

With respect to pricing of access to state-supported networks, such access is subject to rather different criteria than those that apply to other Míla access networks. The PTA does not have the authority to decide unilaterally the price for state-supported local loops owned by municipalities or by other parties that have not been designated as having SMP. If the PTA receives notifications that a specific municipality is collecting prices that are not in accordance with state support rules, the Administration will examine such notifications and try to adjust the pricing.

Míla comments on paragraphs 235, 236 and 238 in the preliminary draft, which discuss Míla local loop lease. Míla states that about 58% of mass-market Internet connections in Iceland are over fibre-optic. This number applied in mid-2019 and since then about 5-10% have been added to the number and even more will be added during the lifetime of the analysis according to Míla. Míla points out that the behaviour of consumers indicated that VDSL was not a substitute for 1000 Mb/s fibre-optic connections. Míla considered it perfectly clear that the chain of substitution is broken in this instance, as the behaviour of parties to the market and of consumers strongly indicated this.

Míla pointed out that pursuant to the Míla plans for decommissioning, copper would be decommissioned to about 60-70% of households and companies in the country during the next 5 years. Míla rejected that the PTA should come to the conclusion that these plans did not need to be taken into consideration in this market analysis. Míla considered it perfectly clear that the impact of decommissioning copper would have a significant effect on the market and on market conditions during the lifetime of the analysis. It was established that Míla would at many locations not own any local loops, only decommissioned copper local loops. Míla considered that the PTA should assess and take into account the impact of this on the market status during the lifetime of the analysis.

The position of the PTA

The PTA has gathered the newest information on the number of connections of each type. Further information will be provided on those numbers in the revised analysis (Appendix A) and a projection made for the coming years. The PTA considers that the newest figures do not give reason for amendments to the conclusions of the analysis.

Míla has sent a rough plan of decommissioning the company's copper system to the PTA. The plan is submitted with reservations and it depends to a considerable extent on the level of success achieved in increasing fibre-optic connections, among other things in areas where

the number of users is small and, where there is uncertainty about expectations of profits from investments. With respect to imponderables, one may estimate that decommissioning the copper system could take longer than the projection states, and that there is little likelihood that it will take a shorter period of time. In any event, the PTA still assumes a three-year period of validity for the analysis, despite the fact that there have been delays in the implementation of this analysis. The PTA considers that because of considerable development on these markets currently taking place, it is not justifiable to allow more than 3 years to pass before the next analysis. If there are very significant changes to the markets within this period, the PTA will immediately commence a review of the analysis. For this reason, the PTA stands by the conclusion that decommissioning of the copper system will not have a significant impact on the conclusions of the analysis during its period of validity.

Míla objected to Ljósnet to companies being on the same market as fibre-optic local loops, as they were not comparable products. Fibre-optic rollout as such is directed first and foremost at households and the building of a comprehensive network in larger areas, while Ljósnet for companies was provided according to special orders and as appropriate against a share of start-up costs. Nor was pricing comparable between these two products. Both costs and lease prices for Ljósnet were, in the light of the specialised nature of the product, considerably higher than for fibre-optic local loops. Ljósnet were, as previously stated, deployed by order and quality requirements were considerably more than for fibre-optic local loops on the Míla PON system. There were also quite different grounds for these investments than for deploying fibre-optic to households, which was explained among other things by higher lease prices. As Ljósnet in mobile phone transmitters and Ljósnet to companies were absolutely comparable products, and as costs were booked to the same accounts in the Míla bookkeeping system, these Ljósnet needed to belong to the same market. Ljósnet to companies and to mobile phone transmitters were however not underlying service for Market 3b, as generally applied to products that were categorised under Market 3a. These were end-to-end fibre-optic but did not rely on the Mila PON system. Bitstream access was not provided to this fibre-optic, but it was rather that the customer himself, installed his own equipment on the fibre-optic and had complete control over the data transfer speed he wished to achieve over the fibre-optic. It was therefore most logical for Ljósnet to be defined on Market 4, or as a separate market.

Míla Furthermore stated that the EU Commission had proposed that Ljósnet to mobile phone transmitters should belong to Market 4 rather than to a separate market (there was no mention of the possibility of having these Ljósnet belong to Market 3a). Míla pointed out that Ljósnet to companies and to mobile phone transmitters were comparable products within the Capital City Area. Míla also pointed out that in Denmark, the same service product was offered, i.e., fibre-optic which was deployed separately to companies and to electronic communications locations against a civil works charge and a special monthly charge.

The position of the PTA

As stated here above, the PTA plans to take this Míla comment into account and designate P2P Ljósnet to companies as not belonging to Market 3a.

Míla made comments in an appendix to paragraphs 244-245 in the preliminary analysis, where the GR fibre-optic network was described. Míla stated that there was a very brief discussion on the GR service territory and product offer in two paragraphs. The company had about 50% market share in its service territory, which covers the south-west corner of the country, which was the area where most of the country's households were located. Míla considered it to be absolutely clear that the PTA had thus not adequately examined the impact that competitive pressure from GR had on Míla, or how the development of GR market share would transpire over the lifetime of the analysis. GR offered to lease local loops to companies. It was incorrect to assert otherwise, as Míla and GR have for example taken part in a number of calls for tenders where this was a requirement.

The position of the PTA

The PTA points out that there is discussion on GR operations in a number of places in the analysis and that this is therefore not the only discussion on the company. In this instance, only the GR service offer in wholesale is being discussed. As that offer is not as varied as the Míla offer, it is normal that this Section is shorter than an analogous Section on Míla. GR does not offer public access to local loops to households. Although the company has taken part in a number of calls for tenders where local loops of some type were part of the call for tenders, such product offer is not a part of mass-market access service to households, but rather in all likelihood, connections that belong to Market 6 (Terminating segments of leased lines). As the PTA had agreed not to designate P2P Ljósnet to companies as part of Market 3a, these connections will not be discussed further here. The PTA therefore considers that GR does not conduct external sales on Market 3a.

Míla made comments on paragraph 246 in the preliminary analysis, where there is discussion on the Tengir fibre-optic network. In the opinion Míla, information was lacking to the effect that Tengir also provided service in Norðurþing, in Langanesbyggð, Skútustaðahreppur and according to Míla information also in Fljótsdalshreppur.

The position of the PTA

The PTA has gathered more detailed information about the Tengir distribution area, homes passed, number of connections in use and future plans, and will revise the analysis to the extent necessary. Among other things, the PTA will update the picture of Tengir's distribution area in section 6.3 in the updated preliminary draft (Appendix A). The PTA considers this addition to the distribution listed in the preliminary analysis not to be of such a size that it would have an impact on the conclusions of the analysis.

Míla made comments on paragraph 248 where there is discussion on smaller local fibre-optic networks. In the opinion of Míla, discussion was lacking on Snerpa, which offered fibre-optic service to more than 1000 households in the West Fjords.

The position of the PTA

The PTA has gathered more detailed information on the Snerpa network and services and will revise the analysis as necessary. The PTA considers that this information does not have an impact on the conclusions of the analysis.

4.3 Assessment of various access technology for the wholesale market for local access (M3b)

4.3.1 Cable system for TV

Míla comments on paragraph 253 (Section 4.3.2) where there is discussion on cable systems. There was no information to be found there on Kapalvæðing, which was a network operator at Reykjanes, and which had both cable and fibre-optic systems, which were used for the company's data transfer service. According to Míla information, some thousands of Internet connections were on these systems.

The position of the PTA

In Section 4.3.2 there is discussion of a cable system in Reykjanesbær and that is the Kapalvæðing system. The discussion is based on information that the PTA received about the system at the time that the preliminary analysis was made. Subsequent to the comments from Míla and Siminn, the PTA gathered further information from Kapalvæðing. It came to light that the connections in use in the cable system are fewer than the PTA had allowed for in the preliminary analysis, i.e., only [...] on the cable system in question at the end of 2020, and there is nothing that indicates that the cable system had such an impact on the status in the relevant wholesale and retail markets that designating it as belonging to the relevant markets would have any significance. The system reaches [...] spaces and the usage is only [...]%. Wholesale access to the system has not been provided as parties to the market have not requested such access. Kapalvæðing has no plans to enlarge the system and has instead made an agreement with GR on access to the GR fibre-optic system and will therefore provide retail service over the whole GR operational territory. The PTA will revise the text of the section and give a more detailed description of the status of the Kapalvæðing cable system. The customers of Kapalvæðing in internet access over cable are included in the relevant retail market and are counted when retail shares in the municipality is calculated.

4.3.2 Internal sales

Vodafone pointed out, in connection with paragraph 258, which relates to internal sales on Market 3b, that Siminn did not only operate at retail level, but also at wholesale level.

The position of the PTA

The PTA will mention that Siminn operates to some extent at wholesale level. Siminn, however, does not sell service that belongs to Markets 3a and 3b. Also, a part of Síminn's

operations was transferred to Mila at the beginning of 2021, among other things the mobile phone distribution system and the IP-MPLS system.

4.3.3 Conclusion regarding definition of Market 3b

Nova refers to paragraph 259 where there is discussion on the PTA conclusion with respect to definition of Market 3b and voiced its agreement with the PTA on definition of the relevant wholesale market and particularly on there being a chain of substitution between varying solutions on copper and fibre-optic on the retail market and that taking this into account one had to conclude that a chain of substitutability also existed in the relevant wholesale Markets 3a and 3b.

The position of the PTA

The Nova comment supports the PTA conclusions.

4.3.4 Central access on offer in this country

Nova referred to paragraph 264 where there is a discussion on Access Options 1-3 with Míla. Nova considers that arguments are lacking for public Internet service being part of access service instead of being defined separately as IPTV and VoIP service.

The position of the PTA

Míla presents its tariff for bitstream transfer such that the product bought is transport through a virtual network that carries public Internet. Access to virtual networks for transport of IPTV and VoIP is sold as an addition to the transport for the public Internet service. In this manner, the retailer cannot provide consumers with IPTV or VoIP service unless by also paying for Internet transport, if the consumer does not have an activated Internet service. One can consider it likely that such an arrangement could strengthen the position of those retailers that can offer households all 3 services in the same package. This can particularly apply when retail competition appears increasingly to develop in such a manner that consumers are directed to bundles.

Although Míla is subject to obligations on access, non-discrimination, and price control, the PTA has in general not intervened in how the company structures its product offer and does not intend to do that now.

Vodafone states in connection with paragraph 260 in the preliminary draft, where there is discussion on central access on offer from Míla, that Míla also offers e.g., 500 Mb/s on GPON.

With respect to paragraph 262, which discusses Access Option 2, Vodafone pointed out that the company purchased A2 from Míla which means that the PTA assertion that wholesale purchases did not use that option is incorrect.

In connection with paragraph 263, where there is discussion on Access Option 3, Vodafone pointed out that it had been extremely impractical that in order to use A3, service had to be purchased both from Siminn and Míla.

With respect to paragraph 264, Vodafone referred to the text of that paragraph where it was stated that Access Options 1, 2 and 3 were connections in the access network for Míla bitstream service for central access with a fixed connection for mass-market products over copper and fibre-optic networks of that company. Access Option 2 was on offer where MPLS-TP connections were in situ. With the above specified Access Options through ADSL and VDSL solutions on Míla copper networks and GPON and solutions in fibre-optic networks there were generally three virtual networks on offer to households. One virtual network for each service; general ISP service, IPTV distribution system (though not through Access Option 3) and voice telephony with IP transmission, VoIP. Vodafone was curious to know whether the PTA had investigated whether Siminn was purchasing this service over A3 and if not, how was this differentiated and charged for within the Group. In this way, Siminn always had an advantage in the opinion of Vodafone. Vodafone had furthermore heard that Siminn was using some form of 4th virtual network.

With respect to paragraph 269, where there was discussion on local small rural networks, it was stated by Vodafone that municipalities' tariffs varied. Many of them priced local loops as if they were fibre-optic between telephone exchanges, i.e., passive fibre-optic but with the same service as to homes. This was not tenable as these were state supported networks. It was a normal demand that a company like Vodafone could purchase connections into rural networks at the same prices as households on the rural networks. It was precisely the same topology in a facility as in a home. Vodafone therefore requested that general obligations be imposed with respect to this on Market 3a and 3b.

The position of the PTA

The PTA will correct the errors that have been indicated when making the final version of the revised analysis (Appendix A), but this has no impact on the conclusions.

With respect to Access Option 3 and the Vodafone comment that parties requesting access needed to purchase both from Siminn and Míla, the PTA points out that in the beginning of 2021 the IP-MPLS system was transferred from Siminn to Míla. When this happens, all transactions with those requesting access will only go through Míla.

With respect to transactions between Míla and Siminn, the PTA will react to this comment and investigate whether the obligation for non-discrimination is complied with in this respect.

With respect to state-supported networks, reference is made to discussion on the same comment from Vodafone in Section 4.2.5.

Míla made comments on paragraph 264 in the preliminary draft, where there is discussion on Míla Access Options 1-3. There it is stated that IPTV was not on offer on A3. This is not entirely true because the reference offer had been made but the tariff had not been submitted by Míla nor endorsed by the PTA. The reason for this was that the PTA considered there not

to be a demand in place that justified the work that this entailed. The Administration therefore decided that such analysis would first take place if a request came for the service.

The position of the PTA

The PTA will provide more detailed discussion on the status of this case in the final text of the analysis. This nevertheless has no impact on the Administration's assessment with respect to definition and delineation of service markets.

Míla made comments in an appendix on paragraph 266 in the preliminary draft, on Míla plans for decommissioning the copper system over the next 10 years. Míla disagreed that the impact of Míla plans for decommissioning the copper system would have little impact on developments during the lifetime of the analysis. Míla pointed out that the Administration had not presented any data to support this assessment and it appeared thus to be an arbitrary decision.

The PTA had made a decision on definition of markets corresponding to current markets, in 2007 and again in 2014. Six years had now passed since the last analysis and it was unclear when a final decision would be published. The lifetime of the analysis was therefore at least about 6-7 years. According to the current rules on market analysis, an analysis should have been conducted at three-year intervals, but when one considers the execution of market analysis up to this point in time, it was clear the PTA would far exceed the timeframe before a new market analysis was endorsed. A bill for the new Electronic Communications Act allowed for market analysis being conducted at 5-year intervals, so Míla considered there to be little likelihood that a new analysis would come after 2-3 years as appears to be allowed for in this draft. During the coming 5-7 years, there would be extensive changes with respect to the copper system and Míla had plans for decommissioning 60-70% of its copper local loops during the coming 5 years.

Míla considered it extremely important that the PTA took this into account in the market analysis, as it was clear that with these changes, there would not be direct transfer from copper over to Míla fibre-optic, but the transfer would rather have an impact on the wholesale market as a whole. Míla also pointed out that about 15,000-20,000 local loops did not have data transfer and it was therefore likely that these local loops would disappear entirely (i.e. not transfer to another system), which would have a significant impact on Míla market share on M3a. These local loops would disappear during the next 1-2 years if the plans for decommissioning PSTN were realised.

Míla considered it therefore necessary that the PTA made a realistic assessment of decommissioning plans with an analysis and a projection of market development as was one of the fundamental issues when NRAs conducted market analyses such as this one. Míla considered it clear that such an analysis would demonstrate that the impact would be significant during the lifetime of the analysis.

The position of the PTA

The PTA has aimed at reviewing market analyses at 3 yearly intervals as is recommended in the EEA regulatory framework currently in force. Specific circumstances have led to delays on this particular analysis, but in the future, the objective shall be that market analyses will be reviewed at intervals that are generally expected, pursuant to the rules in force in each instance. The PTA has taken measures in its operations to support this. If the bill for the new Electronic Communications Act now in place is passed, the general maximum period between analyses will be 5 years. It will nevertheless be authorised to conduct analyses at shorter intervals, and this can happen if circumstances on markets change significantly. There are also provisions in the bill for it being possible to amend obligations in specific instances without the entire market analysis being repeated. The PTA therefore considers it not correct to expect such a long time between analyses in the coming years, as maintained by Míla. Should there be a significant change on the relevant markets, the PTA will commence a new analysis without delay.

With respect to the Míla plan for decommissioning of the copper network, which is discussed in a number of places in this document, one can say that the plan is rather rough with little breakdown and in addition has a reservation that a variety of factors can have an impact on the plan. It is likely that Míla will not decommission the copper local loops in specific areas unless it has a widely distributed fibre-optic local loop network in the relevant areas, except possibly in the case of very sparsely and little populated areas, which will not have an impact on the overall assessment. Míla has among other things been installing with state aid, purchasing or ensuring long term control over local fibre-optic networks owned by municipalities that have been developed in recent years in collection with the project Iceland Digital Connected. The PTA expects this development to continue during the lifetime of the analysis. Míla has furthermore conducted substantial fibre-optic network rollout in the operational territories of GR and Tengir, which indicates that Míla intends to complete fibreoptic rollout in these areas, at least in the largest part of them. The PTA considers that during the next 3 years there will still be a significant number of copper local loops in use and at those locations where their use has been discontinued, the Siminn Group will have fibre-optic local loops to enable transfer of its customers in the great majority of instances. Decommissioning of the copper local loop system is therefore not likely to radically change circumstances on the market during the period of validity of this analysis.

Míla made comments on paragraph 268 in the preliminary draft, where there is discussion on the Tengir fibre-optic network. Míla pointed out that a large part of the Tengir network had been developed with the participation of municipalities, at least in all of the company's networks outside Akureyri and Húsavík.

The position of the PTA

The PTA does not see how the involvement of municipalities matters at this point in the analysis as the discussion simply concerns service offer. Information on the Tengir distribution territory will be revised but will not have an impact on the conclusions. It should be noted that Míla has been the most assiduous of all infrastructure companies in deploying these country networks with state aid, purchasing them or ensuring long term control of them. The PTA expects this development to continue during the lifetime of the analysis. In addition to this, Míla has access to Tengir dark fibre and extensively offers its bitstream service through the Tengir network. Míla is in fact a much larger player than Tengir in offer of bitstream service through the Tengir network than Tengir itself.

Míla made comments on paragraph 270 where there is discussion on the small local networks. Míla says that Tengir has also purchased smaller networks such as in Skútustaðahreppur.

The position of the PTA

Information on the Tengir distribution territory will be revised but will not have an impact on the conclusions this analysis. The PTA reiterates that Mila has been the most assiduous of all infrastructure companies in such purchasing or installing these local networks with state aid.

5 General on definitions of geographic markets

The Competition Authority (the CA) considers the PTA approach to definition of the relevant retail and wholesale markets to be logical, i.e., that circumstances at retail level and how Míla customers (e.g., Siminn) organised their product development and retail operations vis-à-vis end users (consumers), could be an indication of demand-side substitutability and a business pattern that should be considered when defining a geographical market.

The above discussion from the Competition Authority on line charges in the section on definition of service markets, and on other aspects of operations and business patterns of service providers at retail level, could have an impact on the definition of geographic market for the relevant electronic communications services. It seemed that service providers at retail level, when doing business with Míla at wholesale level, do not make any distinction between Internet service and local loop access on the basis of the location in the country where these goods are sold. In this way seems that promotion, tariff and other business terms, e.g., of Siminn, for Internet service on the one hand and Siminn line charge on the other, are the same regardless of where the end-user was located in the country.

In addition to this, the CA considered there to be indications that competition was significantly limited in retail for local loop access when one considered the fact that there had been little or no price competition in line or access charges in recent years.

The above specified aspects supported the CA assessment that the PTA preliminary conclusion in the draft market analysis that there was no reason to define more than one geographic market in this country, see paragraph 593 in the preliminary draft and the detailed Appendix A1, Discussion on market analyses in Europe with respect to geographic definition of markets.

The position of the PTA

In the opinion of the PTA the above specified CA comment supported the conclusion of the PTA preliminary assessment that the relevant markets need not be segmented geographically in this country.

GR agrees with the PTA that the country is one market, both at retail level and in the wholesale markets in question.

GR wished to correct the misunderstanding that could be understood from paragraph 872, where it was stated that the company's plans did not provide for development across the whole country. It is true that there is no provision in the GR plans for civil works to deploy fibre-optic to the whole country, but the company has continuously examined new opportunities to deploy fibre-optic, particularly in parallel to other civil works, on commercial feasibility grounds. The GR market territory was thus the whole country and opportunities were being examined to increase fibre-optic connections to households, among other things in order to support the government goal of fibre-optic roll-out across the whole country. A good example of increased GR distribution was the deployment of fibre-optic in Árborg and Reykjanesbær, which is currently being implemented. It was stated in the draft that the GR

market territory was mostly limited to the OR service territory, and that development had partly been in step with the maintenance or renewal of other ducts and conduits. GR pointed out that the GR service area had first and foremost been developed around the GR backbone network, which had been developed since 1999. In parallel to the expansion of the GR backbone network GR to West Iceland, South Iceland and Suðurnes, the GR service area had expanded beyond the Capital City Area.

In Árborg GR had had backbone lines through the municipality that it had been possible to utilise to make connections and in Reykjanesbær GR had been able to deploy backbone lines on the basis that commercial feasibility had provided grounds for making the investment. What has prevented GR from embarking on further development at many locations across the country was the fact that access to backbone lines, such as the NATO fibre-optic line, had been too expensive for GR. A basic prerequisite for GR fibre-optic rollout in municipalities in the countryside, was that it had to be possible to provide a backbone line into the municipality in an economic manner, so that GR could provide service at the location in question. With increased civil works and new legal provisions for economies in deployment of high-speed electronic communications networks, it was foreseeable that GR could increasingly connect municipalities in the countryside and the company looks positively at the opportunities that this will offer.

The position of the PTA

The PTA considers that the above specified comments support the PTA conclusion that the country is one market, on the relevant wholesale markets and corresponding retail markets and that it will be so for the lifetime of the analysis. GR regards the whole country as its operational territory, though the company's fibre-optic network does not cover the whole country today. If the company were to acquire access to the NATO fibre-optic which lies around the whole country, or to other backbone connections in the countryside, one can expect the company's service area to expand beyond its current deployment in the coming years, even during the lifetime of this analysis. The government is currently preparing a call for tenders for threads in the NATO cable in question, and the PTA expects a conclusion to be reached on this late in 2021. At the end of February 2021, a working group of the Minister for Foreign Affairs and Development Cooperation submitted a statement and a report, proposing the formal preparation of a tender for two of NATO's three fibre threads, in the interests of telecommunications market, national security and defence interests. The options would be, on the one hand, to rent two threads to two parties with a reservation for some kind of mutual access or sharing of the threads, and on the other hand to rent two threads /pairs to one wholesaler. Since 2010, Vodafone has had a 10 year lease on one thread in the NATO cable in question, which runs around the country, but that agreement has twice been temporarily extended for one year, now until late spring 2022.

In addition to deploying its own fibre-optic network, GR has expressed its interest in connecting to other fibre-optic networks, e.g., the Tengir network and rural networks, and with this the company's operational area would increase significantly on Market 3b though it would remain the same on Market 3a.

GR notes that a prerequisite for the company being able to commence deployment of fibre-optic networks in municipalities in the countryside was economic access to trunk line lease. This analysis does not cover such networks, but this market will be analysed separately

(Market 14/2004) and that analysis has commenced. One can expect this analysis to be completed in 2022.

The PTA will correct the text in paragraph 872 in the preliminary draft, such that the GR market area becomes the whole country, and elsewhere in the analysis where this may be mentioned. The PTA considers, however, there to be little likelihood that the company will have a fibre-optic network that covers the whole country during the lifetime of this analysis, though the company appears to have this as a long-term objective.

Tengir says that it has no comments to make with respect to geographic definition of the wholesale markets in question and to the PTA conclusions on this, including that there is no reason to segment geographic markets in this country. Tengir had learned that despite the fact that there would be no separate geographic markets, the PTA planned to apply varying obligations on electronic communications companies that had SMP, i.e. that there would be limitations on obligations in a number of municipalities in the Tengir operational territory, both on Markets 3a and 3b.

The position of the PTA

The PTA considers that the above specified Tengir comment supports the PTA conclusion that there is no reason to segment geographic markets in this country on the relevant wholesale markets.

Nova agrees with the PTA conclusion that there is no urgent need to segment markets geographically, even though competitive conditions might vary between municipalities. The purpose of separating markets was unclear, as in most municipalities, competition was at a very low level or not effective. Nova is not opposed to the varying obligations that the PTA intends to impose in 6 municipalities on Market 3a and in 7 municipalities on Market 3b, and considers the criteria used by the PTA as grounds for choice of area to be acceptable given the circumstances on the relevant markets.

The position of the PTA

The PTA considers that Nova supports the conclusion not to segment markets geographically in this country on the relevant wholesale markets and to apply varying obligations in specific municipalities where greater competition pertains. In the additional consultation opened by the PTA on 30 October 2020, more municipalities were added to those areas where lighter obligations would apply. Reference is made to the revised market analysis draft in Appendix A and Appendix C, where there is discussion on the conclusion of the above additional consultation in this connection.

Míla states that it disagrees in significant respects with the PTA geographic market definition and considers there to be strong arguments for dividing the country into geographic markets, as market conditions varied significantly today because of competition in service over fibre-optic and that this would in fact remain so and actually increase.

The position of the PTA

The PTA will discuss Míla comments on this issue later in this document where Míla presents its views on this in more detail.

Siminn states that the first step in market analysis on the basis of the Electronic Communications Act would be to define relevant markets. According to item 5 article 4 of the Competition Act, a "market" was an area for sales of a product and substitute product and/or an area for sales of service and substitute service. Substitute product and substitute service was where one product or service could fully or to a significant extent replace another.

In a notice from the Commission on definition of relevant market, there was discussion on how markets should be defined (Commission Notice on the definition of relevant market for the purposes of Community competition law, 97/C 372/03). In the notice it states:

"Market definition is a tool to identify and define the boundaries of competition between firms. It serves to establish the framework within which competition policy is applied by the Commission. The main purpose of market definition is to identify in a systematic way the competitive constraints that the undertaking involved face. The objective of defining a market in both its product and geographic dimension is to identify those actual competitors of the undertakings involved that are capable of constraining those undertakings' behaviour and of preventing them from behaving independently of effective competitive pressure." (Siminn emphases)

As is stated, the purpose of defining markets was to identify competitive constraints that the company in question faced. In the notice, reference is made to definition of geographic market where the following is stated:

"The relevant geographic market comprises the area in which the undertakings concerned are involved in the supply and demand of products or services, in which the conditions of competition are sufficiently homogeneous, and which can be distinguished from neighbouring areas because the conditions of competition are appreciably different in those area."

This was one of the most important steps in the analysis, as an incorrect geographic analysis could lead to a wrong conclusion on the status of companies on the market and thus to which obligations were appropriate to use as a response to the circumstances pertaining on the relevant market. The key issue in analysis of markets was to identify competitive constraints, which was discussed in the notice in question:

"Firms are subject to three main sources or competitive constrains: demand substitutability, supply substitutability and potential competition. From an economic point of view, for the definition of the relevant market, demand substitution constitutes the most immediate and effective disciplinary force on the suppliers of a given product, in particular in relation to their pricing decisions. A firm or a group of firms cannot have a significant impact on the prevailing conditions of sale, such as prices, if its customers are in a position to switch easily to available substitute products or to suppliers located elsewhere. Basically, the exercise of market definition consists in identifying the effective alternative sources of supply for the customers of the undertakings involved, in terms both of products/services and of geographic location of suppliers. "(Siminn emphases)

In this manner it was clear that in the process of defining markets it was imperative to identify competitive constraints, where there was discussion on the available offer at each location to which the customer could switch his custom, both with regards to products/service and

geographically. This was at the core of market definition, i.e., substitutability, and demandside substitutability was the most significant issue.

On market analysis, with respect to the Electronic Communications Act there was discussion in the EU Commission recommendation from 2018 on assessment of SMP with respect to the electronic communications regulatory framework. There it is stated among other things:

"The starting point of any analysis should be an assessment of relevant retail market(s), taking into account demand-side and supply-side substitutability from the end-user's perspective over the next review period based on existing market conditions and their likely development. Having identified the relevant retail market(s) and established whether absent regulatory intervention upstream, a risk of consumer harm due to a lack of competition in the retail market(s) would persist, NRAs should then identify the corresponding wholesale market(s) to assess whether they are susceptible to ex ante regulation under Article 16 of Directive 2002/21/EC (21). They should start by identifying and analysing the wholesale market that is most upstream of the retail market in which said competition problems have been found and defining market boundaries by taking into account demand-side and, to the extent relevant, supply-side substitutability of products."

It was clear that the PTA had not in any way conducted the investigation that the Administration was obliged to conduct according to the law and had thus based the alleged analysis first and foremost on guesswork. The assertion that GR and Tengir both operated on the same geographic market confirms that the PTA market analysis was incorrect with respect to fundamental issues. Siminn pointed out that the PTA could not avoid making an investigation by applying so-called rules of proof instead of investigation, see page 516 in the publication by Páll Hreinsson: *Administrative law – Case procedure*. In this way, the PTA seems to apply rules of proof in many instances, instead of investigating the case in an adequate manner.

The PTA list of data proved that the Administration had not gathered sufficient data to investigate the market. It showed that no data had been collected on the market share development of Míla, GR or Tengir in varying areas since 2013, which was however key data for assessing competitive pressure in the various areas since the last analysis was made. It was not without cause that analyses should take place at 2–3-year intervals.

Simin pointed out, e.g., that the PTA had no data on the extent to which Tengir customers, whether individuals or companies, would have switched their demand to companies that offered service in the Capital City Area, such as GR. This was however the underlying PTA criterion for market definition.

Siminn challenged the PTA to make a real investigation of the markets and to assess markets with respect to demand side substitutability, as it would seem obvious that this investigation would show that the Tengir operational territory was a separate market, as was the GR operational territory.

The PTA market research basically did not exist, and it needed to be conducted. Siminn challenged the PTA to collect such data.

The position of the PTA

It is certainly true what Siminn says, that the first step in market analysis, pursuant to the Electronic Communications Act, was to conduct definition of the relevant markets. The PTA had done this with respect to definition of service markets and the Administration came to the conclusion that the relevant wholesale markets were composed of copper and fibre-optic connections, while other technical solutions were not included there. With respect to geographic definition of the relevant markets, the PTA came to the conclusion that the conditions for segmenting the market geographically were not in place, but that there was reason to impose lighter obligations on specific areas where greater competition prevailed.

Siminn refers to the notice from the EU Commission from 1997 on definition of markets in competition law. The PTA refers to the fact that the Commission issued a special recommendation and guidelines that deal specifically with definition of service markets and geographic markets in electronic communications. ESA has subsequently issued analogous recommendations and guidelines. The PTA considers it better to follow the specific recommendations and guidelines that apply to electronic communications. The PTA however notes that the general notice and the specific recommendations and guidelines are based on the same fundamental principles.

The PTA agrees with Siminn that a wrong analysis of the relevant service markets and/or geographic markets can lead to a wrong conclusion on the status of companies on the market and thus to wrong obligations. The PTA furthermore agrees that the objective is to identify competitive constraints, among other things by assessing demand-side and supply-side substitutability. The PTA did this in the market analysis here under discussion, as in all of its prior analyses.

Siminn then refers to guidelines from the EU Commission on market analysis on electronic communications markets. ESA is now working on analogous recommendations, and the recommendations in force are from 2004. Despite this, the PTA decided to take into account the new recommendation from the Commission in its analysis, having consulted with ESA on this issue.

Siminn refers to discussion in the above specified recommendation from 2018 where it is stated that market analysis should commence with analysis of corresponding retail market or markets, where demand-side and supply-side substitutability should be taken into account. It was not until the relevant NRA had come to the conclusion that there was a risk that consumers would be adversely affected because of lack of competition at retail level if appropriate wholesale obligations were not in place, that such an NRA could analyse related wholesale markets. Everything that Siminn maintains is true and correct, and the PTA has come to the conclusion that effective competition does not prevail on the retail market for broadband connections. One can refer among other things to detailed discussion and arguments on this issue in Section 3 (Competition circumstances on retail markets for access provided at a fixed location and broadband service) and Sections 6.5 and 7.5 (The position on the retail market, with respect to geographic analysis on Markets 3a and 3b) in the revised analysis (Appendix A).

The PTA totally disagrees with Siminn that the Administration had not in any way conducted the investigation that the Administration was obliged to conduct according to the law, and had thus based the "alleged" analysis first and foremost on "guesswork". The PTA further

disagrees that the Administration is breaching the rule of investigation of the Administrative Procedures Act by applying rules of proof instead of an adequate investigation of the case. Comments of this nature actually answer themselves when one considers the detailed analysis that has been conducted. The PTA has furthermore gathered further data and has conducted further investigations subsequent to the preliminary draft that was published for consultation on 30 April 2020 and opened an additional consultation on specific issues, in the autumn of 2020, among other things on the criteria used when areas are categorised into areas with little or no competition on the one hand and more competition on the other. This further investigation has not led to the PTA considering there to be conditions for segregating the relevant market geographically in this country, though the PTA had considered there to be reason to relax some of the criteria that were chosen. With this, the number of areas increased where lighter obligations will apply.

Siminn points out that the assertion that GR and Tengir both operated on the same geographic market confirms that the PTA market analysis was incorrect with respect to fundamental issues. The PTA disagrees with this. After detailed geographic analysis, the PTA has come to the conclusion that competitive conditions between areas in this country, among other things between the operational territory of GR and Tengir or other areas were not adequately heterogeneous to justify separate geographic markets. Consumers in varying areas do not experience sufficiently varying competitive conditions in the form of differences in prices, quality or other factors that must be taken into account. Relatively few NRAs in Europe have segmented the relevant markets geographically, particularly Market 3a, despite the fact that local electronic communications companies operated there.

Siminn also considers that the PTA list of data proved that the Administration had not gathered sufficient data to investigate the market. Among other things, it showed that no data had been collected by the PTA on the market share development of Míla, GR or Tengir in varying areas since 2013, which where however key data for assessing competitive pressure in the various areas since the last analysis was made. The PTA rejects that the PTA list of data had been thin when consultation on the preliminary draft was opened. In any event, it was considerably more extensive now after various data collection, subsequent to the initial consultation and the above specified additional consultation. The PTA furthermore uses data from its regular statistical investigations, which are conducted twice a year and data from the Administration's infrastructure database (GAF). The investigation of the case will not be completed until after the revised draft has been sent to ESA for consultation and subsequent to a final decision being made after consultation with that institution.

The PTA has gathered data on the status by municipality since work on the analysis, commenced in 2018, i.e., as of mid-2018, end of year 2018, mid-2019, turn of the year 2019/2020 and turn of the year 2020/2021, and in addition to this, it has information on development at a national level since the last analysis was conducted. In the analysis in force from 2014, the PTA did not see reason to conduct a detailed geographic analysis of the relevant markets. In actual fact, little happened on the relevant markets during the years after that. In the year 2016, Míla commenced its fibre-optic development at full capacity, and in addition to this, GR and Tengir had gradually been extending their distribution year by year for an extended period of time. When the PTA commenced its market analysis late in 2018, the Administration did not see a reason to gather information at the municipality level prior to that time, among other things because this was extremely burdensome for electronic

communications companies. The Siminn national market share of the retail market for Internet service has in addition to this remained very stable at just under 50% during this period and the share was 46.3% in the end of 2020. The PTA considers this to be sufficient information to reach a conclusion in this case with respect to geographic analysis.

Siminn then pointed out that the PTA had no data on the extent to which Tengir customers would have switched their demand to companies that offered service in the Capital City Area, such as GR. The PTA points out that when making geographic analysis, it is not realistic to assume that people or companies will move between regions of the country because of varying prices of electronic communications services. In addition to this, prices in retail do not vary between regions in this country.

Siminn noted that, apart from definition of the relevant products or service market, geographic analysis of markets was the other key factor when defining markets. That is to say, to analyse where competitive conditions were sufficiently homogeneous to indicate instances of the same market. In the notice from the Commission from 1997, there was discussion on geographic definition where reference was made to a difference in distribution of market share being an indication, as were service offers, and whether a party could easily switch to the region in question and begin providing service there.

There was discussion in the notice on data that was used to analyse geographic markets, see paragraphs 44-55. Data that demonstrated that customers had switched their custom to other areas were examples of data mentioned by the Commission. In addition to this, the nature of demand, geographic transactions, switching of customers and barriers to moving custom to companies that were located in other areas.

The Competition Authority has always defined retail markets as local markets, see decisions nos.1/2020, 28/2018, 28/2017, where the Competition Authority has come to the conclusion that consumers purchased specific service only in their local environment. The same development can be seen with respect to electronic communications service over a fixed line with other NRAs. In Competition Authority convenience store cases, customers could at least shop in convenience stores that were at some distance from their homes, though the Competition Authority thought this was unlikely. In the case of fixed line connections, the customer could not purchase service that was not on offer into his home. It was impossible for someone living in Akureyri to purchase Internet service through the GR system.

When the above specified factors are examined, one could not come to any other conclusion than that the markets here under discussion should be defined on the basis of their location. Market share or difference in market share and differencing development by region, were one clear example that showed that markets should be defined on the basis of their location. A simple examination of where inhabitants in Akureyri purchased the service would for example be confirmation that people living in Akureyri did not purchase service from companies in Reykjavik, such as GR, and one could therefore categorically state that this was a local market.

The position of the PTA

Siminn correctly says that when assessing homogeneity of competitive conditions, a difference in distribution of market share and the offer of service would be among the factors that it would be possible to take into account. The PTA did that in Sections 6.6 and 7.6 in the preliminary analysis, see now Appendix A. When all the factors that have been assessed by the PTA were considered as a whole, the PTA conclusion was that there was no reason to segment markets geographically on the relevant wholesale markets, but only to apply varying obligations by area.

Siminn furthermore referred to whether a party could easily switch to a relevant area and commence service there. Simin referred to supply substitutability and potential competition. In general, one talks about potential competition in analyses of SMP and reference is made to Sections 8.5.3 and 9.5.3 in the preliminary analysis, see now Appendix A. With respect to supply-side substitutability it is stated in paragraph 279 in the preliminary draft that one can say that where it is possible to demonstrate that an electronic communications company which is not operating on the relevant geographic market would launch an entry into the relevant market at short notice if prices were to increase somewhat (5-10%) then the market analysis should be broadened to encompass that company, see paragraph 59 in the ESA guidelines on market analysis and assessment of SMP (SMP Guidelines) from 2004. In paragraph 280 in the preliminary analysis, it was stated that the above specified ESA guidelines generally allowed for the use of a hypothetical monopolist test, that can be used to assess demand or supply substitutability, was the point of departure for geographic definition of markets. It was however stated there that this methodology could lead to a very large number of small geographic markets, which would not be desirable, with respect to achieving the objectives of market analysis, that is to say to impose appropriate obligations on companies with significant market power for the purpose of strengthening effective competition, for the benefit of consumers. For example, such a price increase in one area would in all likelihood not on its own result in other companies extending their networks to the relevant area. It should be pointed out that GR, Tengir, Snerpa and Austurljós had been extending their distribution area and aimed to extend further, without this having been related to such a price difference.

Siminn also pointed out that the PTA had to take into account data that showed that customers had switched their custom over to other areas. The PTA continues to refer to paragraph 280 in the preliminary analysis where there is discussion on the drawbacks of the hypothetical monopolist test, with respect to demand-side substitutability. There it is stated that such a price rise would probably not cause inhabitants to move home between areas. In paragraph 281 it states that the hypothetical monopolist test was only one method of several for defining service markets or geographic markets. For example, consumer choice was often decided by factors other than price. To reach an adequate conclusion it could therefore be useful to aggregate areas where comparable competitive conditions pertain, on the basis of specific objective criteria of one area, into one geographic area. This was precisely the methodology applied by the PTA and was in accordance with the BEREC Common Position on geographic aspects of market analysis from 2014 and with the EU Commission guidelines on market analysis from 2018.

Siminn then refers to factors such as the nature of demand, geographic transactions, switching of customers and barriers to moving custom to companies that were located in other areas. In

its preliminary assessment, the PTA examined a great number of factors prescribed in the above specified BEREC common position from 2014, see access barriers by area and nature of demand. Reference is made to Section 6.6.6 and 7.6.6 in the PTA preliminary draft (now Appendix A) in support of this assertion. The PTA furthermore considers that in Iceland there is not such a difference in consumer transactions with electronic communications companies by area that this would justify separate geographic markets. The same can be said about switching custom. Switching custom between electronic communications companies is not a problem in this country, whether a consumer is moving between areas or not.

Siminn refers to the fact that the Competition Authority has generally defined retail markets as local markets and that the same development can be seen with NRAs in other countries with respect to electronic communications services over fixed lines. The Competition Authority decisions referred to by Siminn relate to the pharmaceuticals market and to the convenience store market at retail level. For reasons that have been explained here above, it is not realistic to assume that customers of electronic communications companies move home, solely to switch electronic communications company. Then there is the fact that the Competition Authority has not defined the electronic communications market here under discussion in such a manner that there would be geographic segmentation. The Competition Authority furthermore supports the conclusion presented by the PTA concerning geographic definition of the relevant wholesale markets and corresponding retail markets. The PTA rejects that many NRAs have come to the conclusion that the relevant retail markets or related wholesale markets should be segmented geographically, though this has increased somewhat, particularly on Market 3b. But when this was done there had generally been at least 3 electronic communications networks in the relevant area, which is not the case in this country except in Reykjanesbær. Despite the existence of a cable system in Reykjanesbær, the PTA does not feel there to be reason to separate that market geographically as is further explained elsewhere in this document, and in the revised analysis (Appendix A).

With the above in mind, the PTA considers there to be no reason to segment geographic markets on the relevant wholesale markets in this country, nor on corresponding retail markets.

Míla states that in competition law, geographic markets can technically be considered to be local, regional, national markets or international markets. The size of the geographic market depended among other things on an assessment of the need for the purchaser to be close to the seller. This assessment was normally decided by what characterised the product and the customers, by the routes through which sales and service were conducted and by the nature of the customers, see for more detail the Competition Authority decision in case no. 28/2018 (Lyfja & heilsa hf. purchase of Opna ehf.). The definition of geographic markets was covered in detail in the decision and the Competition Authority came to the conclusion that there was a local geographic market, among other things on the basis of an examination of the nature of the customer group in question in the relevant area, the conclusion of a consumer survey among customers of the companies in a specific area, advertisements and statements made by the parties themselves and other factors.

The need for direct connection between buyer and seller is particularly important, as are the time and travel costs needed to reach the buyer at a greater distance. The market thus had a

tendency to be local when there was a strong need for direct communications between customers and the seller of the product. It had generally been considered in competition law that retail markets were local.

Míla referred to an article by Mario Monti, then director of competition issues at the EU, "Market Definition as a Cornerstone of EU Competition Policy, Workshop on Market Definition", Helsinki 2002, page 24 and a report by the UK competition authorities from 10 April 2017, "Retail mergers commentary".

It was clear from the nature of the retail markets in question here, as the PTA in fact seems to agree with in its preliminary assessment, that neither demand side nor supply-side substitutability appears to exist between geographic areas. The service with end-users was local and took into account the location of the end-user in question. It was almost inconceivable that end-users would be prepared to move home if the retail price was raised by 5-10% for an extended period of time. It was in the same way, unlikely that new electronic communications companies would commence operations in the relevant area with such a price increase. One could then assume on the basis of results of a hypothetical monopolist test, that geographic markets of the case should in general be considered local.

The position of the PTA

The above comment from Míla is very similar to the comment made by Siminn, which the PTA answered immediately prior to this comment. Reference is made to this answer.

Then **Siminn** stated that one had to take into account that an area varied depending on whether a company other than Míla had deployed an access network. Siminn considered it unavoidable to discuss briefly the position taken by Ofcom, which was published in an Ofcom consultation document from 8 January 2020, (Consultation: Promoting investment and competition in fibre networks – Wholesale Fixed Telecoms Market Review 2021-26). There was discussion in the document on the same market as is under discussion here, except that Ofcom also dealt with the market that included a traditional part of a network system, i.e., access to ducts and analogous facilities. The following is stated in the Ofcom analysis:

"Our geographic assessment identifies proposed geographic markets for WLA and LL Access. The key consideration in defining geographic markets is whether competitive conditions in different areas are significantly different from each other."

"We recognise that there are arguments for applying a higher or lower threshold. Our proposal is to apply a 50% threshold when considering MSNs. A 50% threshold means that we only include postcode sectors where an MSN network passes more than half of premises in that locality. We think that is a reasonable approach to drawing a line for where a network is present. We consider that our proposed approach of applying a slightly lower threshold than we previously consulted on is consistent with our strategy of promoting network investment and competition. Setting a higher threshold would exclude postcode sectors even where more than half of premises would likely see competition. Hence, a higher threshold could result in postcode sectors being considered to have no competing networks despite existing or potential network presence covering the majority of premises."

Ofcom then categorised areas depending on whether it was likely that some party intended to deploy a fibre-optic system in the area or not.

As is clear from this Ofcom analysis, there would be a separate market if another company had deployed an access network in the postcode number in question to over 50% of households. Ofcom also separated areas where development was likely from areas where it was unlikely. The reason for this was that competitive conditions vary depending on whether competition was imminent or whether there was no likelihood of there being competition in the relevant area. Such views had to be taken into consideration in the opinion of Míla. In many instances there was only a demand that another company had a market share of up to 10-20% for there to be a case of differing competitive conditions. Not only had GR achieved 100% distribution, but also more than 50% market share.

Ofcom had specifically noted that if the threshold were applied higher than 50%, then that would lead to a post number where competition was effective, being wrongly excluded. This clearly showed that the Ofcom assessment was that competitive conditions where one system had achieved 50% distribution differed competitively from areas where such distribution was less than 50%. Siminn considered it normal to apply the same threshold in Iceland.

In accordance with the Ofcom position, Siminn considered it normal to use areas where one company had deployed a fibre-optic system to at least 50% of households.

The position of the PTA

Siminn considered that it should be deemed that an area differed depending on whether a company other than Míla had deployed an access network. PTA rejects that this on its own can decide whether areas in the relevant wholesale markets should be segmented. In accordance with the BEREC joint position from 2014, the PTA decided to assess homogeneity of competitive conditions in varying areas on the basis of specific objective metrics. The PTA decided to categorise the choice of area, those where there was no effective competition on the one hand and those where there was more competition on the other, by municipality. After having assessed homogeneity of competitive conditions between these areas, the PTA did not see reason to segment geographic markets on the relevant markets in this country. Competitive conditions were not sufficiently heterogeneous between these areas for this. The PTA also reminds that in Europe there had generally needed to be at least 3 networks, with the addition of other conditions, for it to be possible to come to this conclusion.

With respect to the Siminn reference to the Ofcom document from January 2020, the PTA cannot agree that such a consultation document can be a precedent for geographic analysis of the relevant markets in this country. This is not a final decision. There is also the fact that the UK has left the EU and neither the EU Commission nor NRAs in the EEA will have the option of commenting on the draft in question. Conditions on the electronic communications markets in question furthermore differ greatly between the UK and this country. Fibre-optic rollout is for example at a very early stage in the UK while in this country it is advanced. The PTA considers that 50% distribution of another network, or other networks in this country is too low a proportion, as generally there is only one or two networks. The PTA has on the other hand, subsequent to the additional consultation that was opened at the end of October

2020, decided to apply 50% market share for Siminn instead of 40% as allowed for in the preliminary draft, and has also decided not to use a specific market share for Míla. This means that municipalities where lighter obligations will rest on Míla, increase significantly and now reach 70% of the country's inhabitants instead of 40%.

5.1 General

Míla made comments on paragraph 282 in the preliminary draft. It was stated in that paragraph that a more detailed examination needed to be made of demand and supply substitutability on the relevant markets, e.g., where local competitors of the party with SMP could exert competitive pressure outside their operational territory. Míla considered it obvious that this was the case with GR and could not see that the PTA had examined that more carefully. Despite this, Míla pricing in the Capital City Area was different from that in the countryside.

The PTA points out that there were few large competitors that competed with Siminn, but in this connection it was appropriate to note that the CA had endorsed a merger between 365 and Vodafone, which had taken the country's third largest Internet service off the market and resulted in a reduction of competitors.

The PTA had stated that for investment in infrastructure networks to continue, there was a need for a stable and predictable regulatory framework, which among other things was based on market analysis, based on real investigations and on data from the Icelandic market and obligations appropriate to the above information. No real analysis had on the other hand been conducted on the Icelandic market, though it was perfectly clear that Mila market share had steadily and significantly declined during the lifetime of the existing analysis.

It was therefore inconsistent, and was in the opinion of Míla, not a predictable regulatory framework where obligations were added and made more stringent despite the fact that market share declined and that there was considerable movement on the market, particularly at wholesale level. One should not apply more burdensome obligations, and certainly not when the measures in place had led to a shrinking of Míla market share and when one could hardly find a location where development and distribution of high-speed networks was greater than in Iceland. In the light of market development, obligations should rather be lifted than increase them significantly on Míla by announcing a nationwide price control obligation on fibre-optic, which in Míla's opinion was the most burdensome obligation that the PTA could impose. The obligation was not in step with market development on the wholesale market, and nor was it necessary, as less burdensome obligations were in place and were not in proper proportion to the status on the wholesale market.

The position of the PTA

In the above specified paragraph 282 in the preliminary draft, it was stated among other things that regional competitors of the SMP operator exert competitive pressure on him outside his regional territory in a situation where the SMP operator applied the same pricing across the whole country and where the competitors in question were large enough not to be ignored. To demonstrate that there were conditions to segregate the market geographically there should

also be clear indications that regional price differences resulted from varying competitive conditions between areas and did not only reflect a difference in the underlying cost of providing the service in the region in question.

It is true that to some extent Míla applied varying pricing in the Capital City Area and in Akureyri on the one hand and at many locations in the countryside on the other hand. As will be discussed in more detail later, the PTA considers that this difference in prices can first and foremost be attributed to varying underlying costs, rather than significantly different competitive conditions. Only about 8% of Míla sold fibre-optic local loops and 18% bitstream connections are for example in the countryside regions in question, that is outside the GR's and Tengir's area of operation, and by far the largest part of these connections are sold within the Siminn Group. This difference is not passed on to the consumers in varying pricing.

The PTA stands by its assertion that few large parties competed with Siminn on the retail market for Internet service. Siminn had just over 46% market share at the end of 2020, Vodafone had just under 28%, Nova had just under 15% and Hringdu had 8.6% while other smaller parties had about 3%. During recent months the gap between market shares of Siminn and Vodafone had significantly increased. While Siminn had maintained its market share, since the end of 2017, Vodafone had fallen significantly behind. Vodafone has lost much of the share that the company had at the end of 2017, despite the Vodafone merger with 365, i.e., from 37% to just under 28% at the end of 2020. At the same time, Nova, which is the third largest party, had increased its share from 5% to just under 15% while Hringdu had increased its share slightly with about 8.6%% at the end of 2020, but was with 7.3% at the end of 2017. Other smaller parties had about 5% market share at the end of 2017 but are now just under 3%.

The PTA totally rejects that no real analysis had been conducted on the Icelandic market in the preparation of the preliminary assessment in question. The PTA refers to the fact that a detailed investigation of the relevant wholesale markets and corresponding retail markets was used as grounds for the PTA preliminary assessment. Subsequent to this consultation, which took place during the period 30 April to 10 July 2020, the PTA investigated the markets in question even further and gathered various data from electronic communications companies and conducted a consumer survey. This further investigation has only strengthened the conclusion of the preliminary assessment with respect to most issues in the analysis. The PTA however decided to open an additional consultation on specific changes at the end of October 2020, see Appendix C.

Míla points out that Míla market share has declined steadily and significantly since the last analysis in 2014. The PTA notes that Míla market share is still high on both those wholesale markets that are here under discussion. On market 3a, the Míla share was 83% at the end of 2013 but had come down to 57% at the end of 2020. Corresponding figures for market 3b would be 65% and 57%. Though Míla market share had declined somewhat during this 7 years period on Market 3a, but very little on Market 3b, it is still significantly high on both markets, which strongly indicates that the company still has SMP on those markets.

Míla noted that it was not an indication of a predictable regulatory framework that the PTA added obligations at the same time, as Míla market share had declined on the relevant markets and that there was considerable movement on the market, particularly at wholesale level. One should not apply more burdensome obligations when the measures in place had led to

shrinking of Míla market share and when one could hardly find a location where development and distribution of high-speed networks was greater than in Iceland. One should rather withdraw obligations from Míla. Price control obligation on fibre-optic at a national level was the most burdensome obligation that the PTA could impose.

The PTA notes that one cannot expect obligations to remain unchanged between analyses. For this reason, predictability between analyses is subject to limitations. It is appropriate to point out that in 2014, the PTA did not impose an obligation for price control on the company's fibre-optic on the relevant markets, among other things because the company had then hardly commenced deployment of such FTTH networks. The elaboration of obligations depends on the competition problems identified on the relevant markets in each instance. As is stated in Sections 10.2 and 11.2 in the preliminary analysis (now Appendix A), the PTA identified extensive potential and real competition problems on the relevant wholesale markets and related retail markets, despite the fact that the Míla market share had declined somewhat on the relevant wholesale markets. The Siminn retail market share had however declined very little during the lifetime of the analysis, which is now in force, and in addition to this the PTA expects that the Siminn agreement with GR from July 2020 will, all things being equal, very likely lead to an increase in Siminn share during the lifetime of the analysis, even to the extent that the company may have achieved over 50% market share at the end of the lifetime of the analysis, at the end of 2023.

Subsequent to the additional consultation that was opened at the end of October 2020, the PTA decided however to withdraw the intention to impose an obligation on Míla for cost analysed prices on the company's fibre-optic local loops on the relevant markets, and instead to prescribe an ERT test on the Siminn Group. This is therefore a case of a milder version of obligation than the obligation for cost analysed prices, having taken into account proportionality. A further description of the arguments for this is provided later in this document, in Sections 10 and 11 in the revised analysis (Appendix A) and in Appendix C.

5.2 BEREC Common Position on geographic aspects of market analysis from 2014

Míla referred to paragraph 289 in the preliminary draft, and considered that all the conditions in question in that paragraph were fulfilled for it to be possible to segment varying geographical markets, i.e. 1) that the segmented areas needed to be smaller than the whole country and to be mutually exclusive, 2) that it was possible to map the service offer of each electronic communications company in the area in question, 3) that the boundaries of the areas shall be clear and stable and 4) that the areas shall be sufficiently small to ensure that competitive conditions were unlikely to change significantly within the area and sufficiently large to prevent an excessive burden on electronic communications companies and NRAs.

The position of the PTA

Though it was stated in the above specified paragraph in the preliminary draft that these conditions need to be fulfilled for it to be possible to segment varying geographic markets, that on its own does not suffice. These are specific fundamental conditions, but subsequent

to that, the whole analysis remains. After a detailed geographic analysis, the PTA came to the conclusion that there was no reason to delineate geographic markets in this country. The PTA however came to the conclusion that there was reason to impose varying obligations on Míla in specific municipalities.

Míla referred to paragraph 290 in the preliminary analysis which lists the factors that were most likely to indicate a need for a detailed geographic analysis, and made the following comments on the 5 factors:

Varying degree of access barriers between areas: There were substantial obligations on Míla for open access and non-discrimination, both as a result of PTA decisions and because of the Settlement with the CA. This therefore did not apply. If the PTA considered that as there were no access barriers as a result of PTA obligations on Míla, and thus no difference between geographic areas, such that there was no need to segment the market, then this argument did not hold. GR had on the other hand, used access barriers to dark fibre, and in the Capital City Area, GR probably had SMP today, or this would be the case during the lifetime of the analysis.

Variation in number of electronic communication companies operating between areas: It was not possible to compare Iceland with communities with millions of inhabitants, as by the nature of things there could be more competing electronic communications infrastructures. In Iceland there was hardly space for 1-2 and for this reason it should not be possible to conclude that there were varying conditions where there were two network operators.

Market share of electronic communications companies were comparable in a specific area: Market share was verifiably not comparable between areas, and in the GR territory, that company had about or over 50% market share and the same applied to the Tengir territory and at locations where municipalities had deployed fibre-optic networks.

Possible price difference by area: Míla pointed out that there were varying wholesale prices for fibre-optic local loops and start-up charges/installation charges, depending on whether it was in the Capital City Area or the countryside where there was no competition. It was appropriate to point out that GR did not have a public tariff, so it was difficult to operate on a competitive market where the party that in reality had the greatest market share, did not have public tariff.

Difference in service offer by area: Míla should practice non-discrimination, pursuant to the obligations now in force, and for this reason Míla has endeavoured to offer the same service where possible, but an assessment was of course made of number and costs in each individual area. There was therefore a difference in service offered by area. There was also a significant service difference in areas where a Míla competitor had fibre-optic and Míla only had copper. There was also a difference in many areas with regards to service offer of Internet speed. For example, Míla did not offer 1 Gb/s GPON everywhere.

The position of the PTA

The PTA conducted a detailed geographical analysis and came to the conclusion that there was no reason to segment the relevant wholesale markets geographically. The PTA however came to the conclusion that there was reason to impose varying obligations on Míla by

municipality. This is explained in more detail in Sections 6 and 7 in the revised analysis (Appendix A) and in the answers to comments here below.

Míla referred to paragraph 297, which discusses the factors that must be examined, see the BEREC report from 2014, before embarking on an assessment of whether there was a need for a more detailed analysis of competitive conditions in alleged differing geographic areas. These were factors such as distribution of competitors' electronic communications networks, competitive pressure of competitor electronic communications networks on the retail market, service offer, number of electronic communications companies and pricing.

Míla considered that, according to what was presented in the BEREC report, which is referred to here for those factors that must be examined, it was clear that the PTA had not conducted analysis of geographic markets in accordance with that report. The PTA had not made any independent investigation and appeared to use inadequate and unclear data, for example, with respect to distribution. The wholesale price of copper was the same across the country, because of obligations for the same price for the whole country and there was therefore little reason for a retailer to have varying prices across the whole country. The wholesale price for fibre-optic was however not the same for the whole country and this was a difference that consumers paid for fibre-optic service, depending on whether they were in the GR operating territory or in other areas. The retail price of fibre-optic connections to households was lower in the competitive areas, because no charge is made for connecting equipment indoors. It was clear that retailers appeared to follow each other in pricing, which indicated competition.

The position of the PTA

The PTA totally rejects that it has not conducted a geographic analysis in accordance with the BEREC common position from 2014. An obvious example can be referred to in Sections 5-7 in the preliminary analysis (Appendix A), where one can find a detailed geographic analysis on 160 pages, and in addition to this Appendix A-1 contains discussion on geographic analyses by NRAs in 21 European states on an additional 40 pages. Reference is also made to the PTA answer to comments from Mila and Siminn in Sections 5-7 in this document.

The PTA bases its methodology on, among other things the ESA recommendation on market analysis and assessment of significant market power of electronic communications companies (SMP guidelines) from 2004, having taken into account newer guidelines from the EU Commission from 2018, recommendation from ESA on the relevant markets that are the object of ex-ante regulatory intervention from 2016, the BEREC Common Position in question on geographic aspects of market analysis from 2014 and the BEREC report on the experience from this from 2018, recommendations from the EU Commission from 2010 on regulated access to Next Generation access networks (NGA), the recommendation of the EU Commission on consistent non-discrimination obligations and costing methodologies to promote competition and enhance the broadband investment environment from 2013 and the BEREC report on co-investment and SMP, in environments of next generation electronic communications networks from 2012. In executing this task, competitive conditions and the structure of the markets in this country were of course taken into consideration and it was endeavoured to make a projection on probable development of distribution of electronic communications networks and on market shares during the lifetime of the analysis.

The PTA also rejects that it had not conducted any independent investigations and that it used unclear and inadequate data on distribution of networks. The PTA has detailed data on distribution of networks, which is not all published in the analysis. The PTA considered there to be no reason to publish distribution statistics for all 69 municipalities in the country, but the PTA will do that in the revised Appendix A. There is, however, discussion on the municipalities that fulfil the PTA criteria for areas where there is more competition, and a 75% distribution criterion is one of them. Subsequent to consultation that took place from 30 April to 10 July 2020, the PTA gathered on the other hand, detailed data on future plans of electronic communication companies, with respect to further distribution. Subsequent to the additional consultation that was opened at the end of October in 2020, the PTA decided to somewhat relax the criteria that were needed for municipalities to belong to an area with more competition, where lighter obligations would apply. These municipalities are now 17 and they reach 70% of the country's population. The PTA intends furthermore to update the list of such municipalities annually, which is a much more precise method than that of making a projection of likely development during the lifetime of the analysis in this connection.

The PTA will reply to the Mila comments on prices varying by area, later in the document.

Míla referred to paragraph 298 in the preliminary draft, where it is stated that according to the BEREC report that it was not obligatory to analyse geographic markets unless competitive conditions were so different between areas that this could possibly have an impact on either the designation of a company with SMP or identified competition problems, and that "real" competitive conditions should be assessed that are reflected by market behaviour of electronic communications companies, e.g. with respect to their pricing and the impact of their behaviour on the structure of the market, e.g. market share.

Míla considered that competitive conditions in the Capital City Area were very unlike competitive conditions in the countryside and that GR market share was so high in the most populated area of the country that it must have an impact on the market, see e.g. varying prices for indoor cabling and connection of equipment.

The position of the PTA

In its preliminary draft, the PTA came to the conclusion that Reykjavik and Seltjarnarnes belong to areas of a number of municipalities (6 on market 3a and 7 on market 3b) where more competition prevailed than elsewhere. This was based on specific objective criteria. Subsequent to additional consultation that was opened at the end of October 2020, the PTA decided to somewhat relax the criteria that decided the categorisation of the municipalities in question in areas with more competition on the one hand and areas with little or no competition on the other. With this, the areas in question with more competition are 17 municipalities, both on Market 3a and Market 3b, among others, all 6 municipalities in the Capital City Area. It remains on the other hand that the conclusion of the PTA is that competitive conditions are not sufficiently heterogeneous between the two sets of areas in question to justify segmented geographic markets, but rather there is reason to prescribe varying geographic obligations on these areas. Varying prices will be discussed later in this document.

Míla referred to paragraph 299 in the preliminary analysis where it is stated that as the main purpose of the imposition of obligations is to ensure effective competition for the benefit of consumers, the starting point for geographic analysis should generally be the survey of competitive conditions or related retail markets if obligations were not in place on the wholesale market being examined (modified greenfield approach).

Míla says that here it seems that the possibility has been opened to have varying prices by geographic area because of competitive conditions, despite the fact that no more than one service market was defined. According to the PTA draft, it seems that the Administration does on the other hand not intend to allow varying prices, which would lead to a very distorted competitive position for Míla.

The position of the PTA

Subsequent to the additional consultation that was opened at the end of October 2020, the PTA decided however to withdraw the intention to impose an obligation on Míla for cost analysed prices on the company's fibre-optic on the relevant wholesale markets, and instead to prescribe that the Siminn Group had to withstand an ERT test. More detailed discussion on this will be provided in the revised decision draft (Appendix A), later in this document, and in Appendix C.

5.3 The impact of next generation networks and number of infrastructure competitors on geographic analysis

Míla refers to paragraph 304 where it is stated that distribution of next generation electronic communication networks (such as for example FTTH fibre-optic networks) could significantly alter the motive power of competition on broadband markets. This could relate to the distribution of such networks by the SMP operator, by his competitor/competitors or by both/all of these parties, including municipalities and utilities.

Míla considered that in large parts of the country, where municipalities had deployed fibre-optic systems, such a system would be in a monopoly position for the future. Míla considered that such areas should be considered separate geographic markets, defined by postcodes, as such segmentation effectively handled such areas. Míla also considered that market conditions in the Capital City Area justified defining the area as a separate market.

The position of the PTA

With respect to local municipality fibre-optic networks, the criteria used by the PTA when selecting areas with little or no competition on the one hand and more competition on the other, handled such areas well. Subsequent to additional consultation that was opened at the end of October in 2020, municipalities belonged to the latter area if the distribution of an electronic communications network of a party other than Míla had achieved at least 75% distribution and where the Siminn market share in the area was below 50%. This applies for example to the local networks such as in Ásahreppur and Flóahreppur. One should also note that Míla has purchased many of these networks recently and one can expect this development

to continue throughout the lifetime of the analysis, whether the purchaser will be Míla or another electronic communications company. It could be difficult for small municipalities to operate such networks for the future. In addition to this, these networks are mostly developed with state aid, and there is therefore open access to them.

With respect to the Capital City Area, it belongs in its entirety to an area with more competition and thus is subject to lighter obligations. On the other hand, the PTA considers that there is no reason to segment geographic markets in this country. Competitive conditions are not sufficiently heterogeneous between areas for this to be.

The PTA will discuss later the Míla assertion that postcodes are more suitable and normal units to use as a basis than municipalities.

Míla refers to paragraph 305 where it states among other things in the EU Commission recommendation on regulated access to the NGA networks from 2010 that the deployment of NGA networks is likely to lead to important changes in the economic reality of providing broadband access and in the competition situation. It is recommended that NRAs carefully examine the development that may take place in competitive conditions as a result of the deployment of such networks, including the impact of possible definitions of geographic markets if varying competitive conditions are identified that are stable over a period of time.

Míla could not see that the PTA had taken adequately into account the competitive pressure that 1000 Mb/s (VHCN) connections of GR/Tengir had on Míla VDSL connections. Míla considered it clear that it had to be specifically examined whether end users and electronic communications companies purchased new VDSL connections from Míla if Míla or GR fibre-optic service was on offer. According to Míla data, this only happened in exceptional cases which was about [...]% of instances.

The position of the PTA

The PTA came to the conclusion in its preliminary analysis that there was still substitutability between copper and fibre-optic networks. In the comments from Míla and Siminn, subsequent to the consultation that took place from 30 April to 10 July 2020, the PTA decided to examine this issue better and among other things, commissioned a consumer survey, as well as gathering further data from electronic communications companies. The PTA opened a further consultation on this issue at the end of October 2020. Subsequent to this, it is still the PTA conclusion that such substitutability exists. Reference is made in support of this to the PTA discussion in Sections 3 and 4 here above, to the revised Sections 3 and 4 in the preliminary draft (now Appendix A) and Appendix C.

Míla refers to paragraph 325 where reference is made to the BEREC report on co-location and SMP in the environment of next generation electronic communication networks, from 2012.

Míla pointed out that there was probably a typing error as the PTA speaks of "co-location". That should probably be "co-investment".

The position of the PTA

Míla's comment is correct, and the PTA will correct this in the revised draft analysis (Appendix A).

5.4 The risk and/or gain from geographic measures by area

Míla refers to paragraph 337 where reference is made to the BEREC common position from 2014 and discussion on Type I and Type 2 errors. It was stated there that when NRAs conduct geographic analysis, they should maintain a balance between two possible error types which could result from geographic analysis. On the one hand there is Type 1 where deregulation (or the imposition of lighter obligations) has been implemented when in fact regulation (or stronger obligations) should have been imposed. On the other hand, there is Type 2 error where it would have been justified to deregulate (or impose lighter regulation) when regulation is imposed.

Mila considers that the planned PTA decision will lead to "Type 2 error".

Míla furthermore, referred to paragraph 340 where it states that Type 2 error would mean that regulation would continue in the area or areas where there was considerable or even effective competition in place. This could lessen the incentive for the potential SMP operator to introduce innovation which could provide benefits for consumers. There were examples in Europe, where deregulation on M3b, and thus freedom for the SMP operator on that market, had in some instances led to innovation in the structure of product bundles, increased speed of connections and lower price for broadband service at retail level.

Míla considered that here it was clear that planned imposition of obligations on Míla constituted a Type 2 error as it was intended that obligations continued to apply and would, among other things be increased in areas where "significant or even effective competition" prevailed. BEREC also emphasised that the imposition of obligations should not be allowed to inhibit incentives for investments or innovations on the market.

The position of the PTA

The PTA does not agree with Míla that the PTA draft market analysis results in Type 2 error, i.e., that excessive or burdensome obligations are imposed on Míla on the relevant markets. This particularly applies after the PTA decided to make specific changes to the criteria with respect to delineating areas with more and less competition and on the obligation for price control of Míla tariff for fibre-optic network by prescribing an ERT test instead of cost analysed prices. These changes should lead to Míla having more leeway to expand its fibre-optic network, both in areas where another such network is operating and areas where such a network is not in place.

In very sparsely populated and rural areas, where municipalities have developed a fibre-optic network, often with the assistance of state aid, Míla could close its copper networks and not see the advantage in developing another fibre-optic network in competition with a given rural network. In a large majority of these instances, Míla already has access to them for its bitstream service. In addition to this, Míla has been purchasing or ensuring long term control

over such networks or installing these local networks with state aid and one can expect such a development to continue during the lifetime of the analysis.

Míla refers to paragraph 339 where it is stated that Type I error on M3b could result from misunderstanding of end user needs. For example, electronic communications companies that served large customers on the corporate market, needed wholesale products that cover the whole country, as this would reduce opex and software costs for the electronic communications companies in question when they reacted to demand from the large corporate customers that would always want to interconnect all of their operations locations. The withdrawal of bitstream obligations in certain regions could lead to a shortage of wholesale access from SMP operators which could lead to those requesting access having to rely on wholesale access from local parties on business conditions, where such access was actually available. On the other hand, the fact that some service providers might choose wholesale access from one specific party does not mean, on its own, that the relevant market was the whole country. If there were, for example, a sufficient number of service providers in an area which had been deregulated that operated their own electronic communications network in the area in question or could purchase wholesale access from a party other than the former SMP operator in that area, such parties should not need to worry about not being able to provide services to such large companies. These deliberations call for assessment of each individual instance.

In the opinion of Míla, the above did not apply to Iceland as service provider companies generally tried to minimise their business with Míla and to purchase from Míla competitors, where this was an option because of the fidelity discount offered by GR. The PTA decision would lock Míla into this development as business with parties other than Siminn would steadily diminish, both on Market 3a and Market 3b. A non-discrimination obligation would however suffice to resolve this problem.

The position of the PTA

The PTA does not agree with this comment from Míla. Electronic communication companies, like Vodafone, Nova and Hringdu, purchased both from GR and Míla, though the quantity is currently greater with GR. Countervailing buying power of these parties, particularly Vodafone, is considerable and that company, like the others, could switch its business to Míla, either entirely or a larger part than is now the case, as there is no binding on the household market, with respect to GR. On the other hand, by far the country's largest retailer, Siminn, solely did business with Míla up to this point in time in the operational territory of GR. Siminn and GR did however make an agreement on Siminn purchase of bitstream service from GR in July 2020 and this service became a reality in late august 2021. It is not expected that this will be substantial business when one considers the size of Siminn and the number of connections that company has with its subsidiary Míla.

With respect to the assertion on the fidelity discount for Vodafone, Nova and Hringdu from GR, then it can be stated that [...] One can note that the fact that some service providers have not chosen to use the Míla local loops, or to use them in a limited fashion, as fibre-optic is on offer from a Míla competitor, can have a number of explanations. One could e.g. be attributed to Míla being owned by their largest competitor at retail level.

The PTA considers that there is some uncertainty about development of these matters during the lifetime of the analysis and that it can be difficult to make a projection about the development. This does not change the fact that Míla is in a very strong position on both Markets 3a and 3b and the PTA expects that this will continue to be the case throughout the lifetime of the analysis, even if some of Siminn customers may switch from the Míla network to the GR network during the lifetime of the analysis. According to data from Siminn and GR, it is not expected that this will be a very large number as a proportion of total Siminn customers.

Míla refers to paragraph 342 where it states that BEREC had indicated that geographic segmentation of the relevant market could have an impact on price structure of regulated wholesale service. Deregulation of the competition area could exclude a region with lower development costs (common in urban areas), from the calculation of average prices in the area, as obligations would still apply (usually rural areas) and thus the regulated wholesale price would increase. This could lead to higher retail prices in those areas that would remain regulated or lower profits from service providers if the retail price of the SMP operator continued to be level across the country. This could lead to less competition in those areas that are still regulated. NRAs had an available tool to tackle such a problem if they considered it necessary to maintain comparable prices across the country. This could however result in a negative impact on other connected markets, e.g., predatory pricing by the SMP operator in the deregulated areas by virtue of cross subsidies from the regulated areas.

Míla says that it cannot see that the PTA has conducted any analysis of the real impact on the Icelandic market, given the real situation on that market. The PTA cannot build an analysis and impose burdensome obligations without such analysis taking place and arguments being clear and related to the real situation. To refer generally to the reports from BEREC would not be acceptable analysis on which one could build burdensome obligations.

The PTA had pointed out that deregulation in competitive areas would lead to the regulated wholesale prices in the countryside being higher than in the competitive areas. This could lead to higher retail prices, or that there would be a lower markup on regulated areas if the retail prices were the same across the whole country, which would lead to less competition in the regulated areas. The PTA has furthermore stated that NRAs had the tools in place if they considered it necessary to maintain comparable prices at a national level, but such could lead to damaging under-pricing on the part of the SMP operator in the deregulated areas through cross subsidies from the regulated areas. Míla requested explanations of which tools the PTA was referring to, and how these cross subsidies came about.

The position of the PTA

The PTA rejects that it has not conducted any analysis on the impact of obligations for price control, that relate to the real situation on the market in this country. The PTA considers that Míla misunderstands the PTA reference to the BEREC report, in support of its position. This is a text from the BEREC common position on geographic analysis in Section 5, which discusses generally the analysis of geographic markets. Explanations are given there in a general manner on issues that could raise questions that the NRAs would need to consider in

such analysis, but the PTA was not making these words its own. The actual PTA geographic analysis of the relevant wholesale markets is in Sections 6 and 7.

In the PTA preliminary draft, one can find a very detailed geographic analysis, and in addition to this one can find detailed discussion on the potential and real competition problems that the Administration identified on the relevant wholesale markets. Included were also detailed arguments for planned imposition of obligations on the Míla fibre-optic network for cost analysed prices.

In the additional consultation document, which the PTA opened for consultation at the end of October 2020, the PTA planned to withdraw its plans that were presented in the original preliminary draft which the Administration opened for consultation on 30 April 2020, to prescribe a cost obligation for analysed prices on Mila fibre-optic and to prescribe instead that the Siminn Group withstood an ERT test. This obligation provided the Siminn Group with more latitude with respect to pricing than the obligation mentioned above on cost analysed prices. On this matter PTA also refers to the updated preliminary draft (Appendix A), Chapters 6 and 7 below, and Appendix C.

5.5 Geographical delineation and/or varying obligations by area

Míla referred to paragraph 348, where it was stated that geographic markets should be segmented when the NRA had come to the conclusion that the market structure and the competitive situation were in other respects significantly different between regions, i.e., when competition was considered active in a given area or given areas/set of areas to the extent that no party had SMP, and obligations should thus be withdrawn or not imposed. Experience has shown that it could be difficult to reconsider deregulation on markets where effective competition had been deemed to be in place and obligations withdrawn for that reason.

Míla said that the PTA appeared to be afraid to define geographically varying markets and to withdraw obligations as it could be difficult to reimpose them. This was hardly a justifiable reason to decide not to define geographically varying markets. It could not be a reasonable or lawful reason to maintain or increase burdensome obligations that conceivably might be difficult to reimpose were they lifted.

The position of the PTA

The PTA notes that there is also general discussion on geographic demarcation of markets on the one hand and on the other hand the imposition of varying obligations by area, and reference to discussion on these issues in the BEREC common position on geographic analysis. The PTA was not making these words its own but rather referring to the document in question in its general discussion on the geographic analysis of markets, which is stated in Section 5 of the updated preliminary draft (Appendix A). The actual geographic analysis of the relevant markets can be found in Section 6 (Market 3a) and 7 (Market 3b). There one can find detailed arguments for why the PTA comes to the conclusion that there is no reason to segment geographic markets on the relevant markets in this country. In Sections 10.6 and 11.5 it is however argued why the PTA considers there to be reason to prescribe varying geographic obligations on the relevant markets.

5.6 Definition of geographic markets in Europe

Míla refers to paragraph 359, which deals with the situation in Hungary. In the market analysis from 2011 of what are now Markets 3a and 3b, these markets had been segmented geographically into three, in line with the deployment of the country's three electronic communications networks that did not overlap, and the three companies were designated as electronic communications companies with SMP, each in its own area. A new market analysis had been conducted in Hungary in 2017. Circumstances had then changed such that new electronic communications companies were expanding into the operating territory of these electronic communications companies with deployment of their own infrastructure. The conclusion in 2017 had been to divide the country into 6 areas such that the operating territory of each of the above specified three parties had been divided into two areas, i.e., on the one hand competitive areas and on the other hand areas with limited competition.

In the opinion of Míla, the PTA could use this methodology, i.e., GR/Míla territory, Tengir/Míla territory and Míla territory.

The position of the PTA

The PTA considers that the circumstances in this country and in Hungary are not comparable. The competitive areas in Hungary had been decided such that there needed to be a minimum of two competitors to the SMP operator that had their own infrastructure (i.e., 3 companies in total with their own infrastructure). Then both competitors of the SMP operator needed to have achieved at least 15% market share and jointly 50% market share in the relevant area. The conclusion had therefore been that the competitive areas were those areas where at least 3 networks were operated, and the market share of the prior monopolist was less than 50% and that two competitors (network operators) both had at least 15% market share in the relevant areas. The competitive areas in question reaches 20% of the population of Hungary.

The circumstances are not as above in any municipality in this country, as in general, there is only the Míla network or the Míla network plus one infrastructure competitor. It is certainly true that the company Kapalvæðing operates a cable system in Reykjanesbær, and the PTA has previously provided arguments for why the PTA considers there to be no reason to segment that municipality as a separate market in this country. Among other things, the Siminn market share is over 50% in that town, or more precisely [...]% at the end of 2020.

Míla refers to paragraph 360 where it was stated that since May 2018 two states had joined the group of 3 states that had delineated geographic markets on Market 3a, i.e., Italy and Poland. In July 2019 the EU Commission had agreed a draft market analysis from AGCOM, the Italian NRA, which allowed for the division of Italy into two areas for the market in question, i.e., Milan on the one hand and the rest of Italy on the other. The reason why Milan had been considered a separate market was that there were three varying access networks there, i.e., besides the network operated by the former monopoly holder. The conclusion had been that there was effective competition in that city on the market in question and for this reason, obligations had been withdrawn from the former monopoly holder. Varying geographic obligations had been furthermore prescribed in the market analysis in question.

Míla pointed out that circumstances in this country were quite different than those in countries with tens of millions of inhabitants. In this country it should be sufficient to apply the criterion of one other access network and not two.

The position of the PTA

The PTA points out that no state in the EU has considered the network of one competitor of the former monopoly holder adequate to come to the conclusion that Market 3a should be segmented geographically. This was however the case in Portugal on Market 3b in 2016. Circumstances then in Portugal, and here in this country today are very different. In that case, the NRA has long placed strong emphasis on access to ducts and conduits and thus on competition in developing fibre-optic networks with such access. In this country, such access has not been used much, at least up to now. There is also the fact that the SMP operator in Portugal had barely commenced FTTH rollout in 2016, while Míla FTTH rollout has been at a very high level in past years and is now very substantial, or just under 50% by the end of 2020.

In addition to this, Míla controls a copper network with close to national coverage, though, one may expect the company to decommission this in part during the lifetime of the analysis. In the opinion of the PTA this will however be in areas where the company has already deployed fibre-optic or has long term control of such a network. One can expect Míla to decommission some of its copper networks in very sparsely populated and rural areas, where another party has deployed fibre-optic and the company did not intend to deploy a fibre-optic network in parallel to such a network. In the opinion of the PTA, such decommissioning will be on a very small scale when compared to the total context. In addition to this Míla has installed its bitstream equipment on almost all of its rural networks.

It was the PTA conclusion that competitive conditions in those municipalities where there was little or no competition on the one hand, and on the other hand in those municipalities where more competition prevailed, are not sufficiently heterogeneous in this country to justify geographically segmented markets during the lifetime of the analysis, without prejudice to what may transpire in the future.

Míla refers to paragraph 364 where it stated that in the BEREC report from 2018 on geographic analysis there was discussion on the reasons for the increased significance of geographic analysis on Markets 3a and 3b. The main reason was on the one hand said to be related to the deployment of next generation networks (for example, fibre-optic networks), both of the former monopoly holders and of their competitors, and on the other hand the uptake of regulated access to electronic communications services. The latter reason applies first and foremost to Market 3b. BEREC considered that as this development will continue, the importance of geographic analysis will further increase in the future.

In the opinion of Míla, the PTA should follow the same route as widely elsewhere in Europe and emphasise geographic analysis. It would, on the other hand, never be possible in such a small country as Iceland that the requirement was that three different networks should reach each household. Here there are two networks that reached by far the largest proportion of inhabitants.

The position of the PTA

The PTA placed strong emphasis on geographic analysis in this instance and reference is made to detailed discussion on this in Sections 5-7 in the preliminary draft (now Appendix A and A-1). It is widely known in Europe that detailed geographic analysis has not led to separate geographic markets, but only to varying obligations, or even no geographic measures. The PTA is not saying that segmentation of geographic markets will not under any circumstances come to pass in this country, even if there were only two networks. But for this there need to be strong indications that competitive conditions are significantly different between markets. It is common in Europe that the first step in such a process is to begin by prescribing varying obligations.

Míla refers to paragraph 365 where it is stated that in the above specified BEREC report from 2018, there was discussion on the main reasons for varying competitive conditions between areas. With respect to Market 3a, the reason was first and foremost the deployment of next generation networks by competitors of the SMP operator (e.g., in the form of fibre-optic cable systems). Furthermore, there is the fact that market share of the SMP operator in wholesale and/or retail had decreased and had begun to fall below a specific level (often set at 40% or 50%). With respect to Market 3b, the same reasons are named and in addition, the take-up of regulated access to wholesale services on Market 3a.

Míla pointed out that there was no discussion in the preliminary draft on potential joint SMP status for GR and Míla.

The position of the PTA

Given the conclusion of the PTA, to consider that there is still substitutability in this country between copper and fibre-optic networks and that no reason was seen to segment geographic markets on the relevant wholesale markets, conditions on the relevant markets did not indicate that there could be a joint SMP status for Míla and GR. This is the reason why that complex and time-consuming task was not embarked on.

Míla refers to paragraph 370 where it was stated that after having analysed the geographic areas, the next step was normally to group those areas with similar competitive conditions. Areas were normally grouped as competitive on the one hand and areas where there was no competition on the other hand. Varying criteria could be used for such grouping. On Market 3a the most common criteria used were on the one hand that a specific number of competitors of the SMP operator had begun to deploy their own infrastructure above a specific level and on the other hand that the market share of the SMP operator had fallen below a specific level in retail. The same could be said about Market 3b, but in addition it was common to use a criterion based on the number of competitors of the SMP operator. These generally had to be "significant" competitors who achieved for example, 10-15% minimum market share. In the states in question the deployment condition was anything from 20-75% (though usually between 50% and 75%) The criterion for market share of the SMP operator was variously 40% or 50%.

Míla pointed out that the PTA had chosen to set the strictest conditions in all its criteria on when one should withdraw obligations from the company. The PTA had also chosen to link the Siminn market share on the retail market for Internet with the Míla market share on the local loop market. Míla had no control over whether or when Siminn reached an agreement with GR and/or Tengir on the company's bitstream service. In this way, Míla could have an insignificant proportion of local loops and/or bitstream service in a municipality, but nevertheless have all the obligations on that market, simply because Siminn had a 40% share of Internet. The fact that Míla was a wholesale company subject to an Equivalence of Input (EoI) non-discrimination obligation on the basis of the Settlement with the Competition Authority should mean that it would not be necessary to link obligations to Siminn market share on the retail market, but only to the Míla market share.

Míla considered that in large areas of the countryside, service providers saw advantage in offering their own network service. The reason was simply that the locations were so small that they could not support many network operators with their own equipment (in fact market failure). In such areas, one could expect that Míla would have a high market share and also considerable costs providing the service. Such locations meant that Míla market share at national level could be high while at the same time, market share was low at those locations where profit expectations were highest. This planned decision would mean that Míla was obliged to withdraw service to such areas in order to be able to participate in competition in competitive areas, where profit expectations were highest. Anything else could have serious consequences for the company.

The position of the PTA

In the preliminary draft, the PTA considered it normal to apply 75% distribution of networks of parties other than Míla, because of the fact that in general, there is not more than one network of a Míla competitor in place. The PTA does not intend to change this criterion. On the other hand, the PTA proposed in the additional consultation that was opened in October 2020, to change the criterion for Siminn market share to 50% instead of 40% and to remove the condition on Market 3a that related to a specific Míla market share. It is a well-known practice in Europe, to apply the market share of the retail arm of vertically integrated companies or company groups. Given the data the PTA has at its disposal, there is significant correspondence between the market shares of Míla and Siminn in the various areas. Among the factors the PTA took into account when making this change was that Siminn came to an agreement with GR after the preliminary draft was submitted for consultation, and there was furthermore greater proportionality in these changes. This led to more municipalities now belonging to areas with more competition, where lighter obligations would apply or 17 in each market instead of 6 in market 3a and 7 in market 3b in the preliminary draft.

The PTA reiterated that in the additional consultation document in question, the PTA proposed that an obligation for cost analysed prices for the company's fibre-optic on the relevant wholesale markets would not be imposed on Míla, but instead the obligation for price control would be elaborated in the form of an economic replicability test (ERT). This should provide Míla with latitude to provide service in the countryside and to extend FTTH networks there.

Míla refers to paragraph 371 where it was stated that in the BEREC report in question from 2018 it was stated that most NRAs had taken expected future development into account when elaborating geographic measures. Both expected development of market share and expected development of deployment of next generation networks, including fibre-optic networks were taken into account.

Míla considered that the PTA had not followed these guidelines, i.e., no attempt appeared to have been made to make a projection on development of the relevant markets during the lifetime of the analysis. All of the PTA discussion appeared to relate to the status in mid-2019 and to the years before that time, i.e., looking only to the past. It appears that nowhere was a serious attempt made to include changes that it was known would transpire during the next 1-2 years, e.g., what the impact of the decommissioning of the voice telephony system (PSTN), the speed and division of fibre-optic rollout or electronic communications companies' development of 5G systems, would be. The PTA also seems to believe that the Míla plans to decommission a large part of the copper system during the lifetime of the analysis would not have an impact on the conclusion of the analysis and seems to believe that all of the impact from this would not occur until after the lifetime of the analysis, or that it simply was of no importance.

The last market analysis on these markets had been in the years 2007 and 2014. Experience therefore showed that one could expect the lifetime of this analysis to be 6-7 years, at least. Míla could not see that the PTA had presented any arguments or data for this position and considered that the PTA needed to add a detailed analysis of these factors and to significantly improve its arguments as to why the Administration considered that none of these issues would have an impact on the analysis.

The position of the PTA

The PTA endeavoured to make a projection on the development of deployment of mobile phone networks and on market shares in its preliminary draft. Such projections are often difficult and revolve around various undecided factors. After the preliminary draft was submitted for consultation on 30 April 2020, certain changes have taken place on the markets in question. Among others, Siminn and GR had made an agreement on Síminn's bitstream access to the GR fibre-optic network that commenced in late august 2021, and the companies have come to an agreement on the likely number of Siminn customers on the GR network and furthermore, the companies have made an assessment of how many of those customers will come from the Míla network and how many are already on the GR network and thus came to Siminn from other electronic communications companies which were already on the GR network.

The PTA gathered more detailed data from electronic communications companies subsequent to completion of the above specified consultation on 10 July 2020, and the Administration will revise its projection of the likely development of distribution of electronic communications networks and market shares during the lifetime of the analysis in the revised draft decision (now Appendix A). The PTA points out, however, that subsequent to the additional consultation, the PTA intends to annually revise the list of those municipalities that are included in the areas with more competition, where obligations will be lighter. Such a methodology is more precise than projections of unlikely development in the future.

The lifetime of the analysis now being reviewed has been too long, and the PTA does not expect that the lifetime of this analysis, that is now being processed, will be more than 3 years, as there has been considerable development in the relevant markets in recent times and it is expected that this will continue in the near future. The lifetime of the analysis could be shorter than 3 years, if significant changes take place on the market in the near future, which cannot be ruled out. The PTA is now for the first time conducting detailed geographical analysis and the Administration has recently collected information and built up a geographic database which the PTA applies in this analysis. The PTA expects that it will not take a long time to update such an analysis regularly, as the database is updated.

In the revised draft, the PTA will mostly apply statistical data from the end of year 2020 and in various instances will apply newer figures and data that the Administration has recently gathered. In its revised draft, the PTA has taken more into account than in the preliminary draft, the factors Míla mentions here above, i.e., decommissioning of the PSTN voice telephony system, Míla plans for decommissioning the copper system, expected fibre-optic rollout and development of 5G systems.

Míla refers to paragraph 378, where it is stated that the most common criteria for choosing potential competition areas were on the one hand that there was a specific minimum deployment of networks by a specific number of competitors of the SMP operator and on the other hand that the market share of the SMP operator had fallen below a specific level, which was generally 40% or 50%.

Míla considered that the PTA did not take into account the measures that had already been taken to ensure that electronic communications companies had equal access to Míla systems, such that Míla could not discriminate with respect to related parties. It was for example not taken into account in this analysis that the company was a wholesale company that operated independently, with an independent board where the majority of directors, including the chairman of the board were independent of Siminn.

Míla considers that the Siminn market share on the retail market should not be applied when examining the withdrawal of obligations from Míla. Siminn had notified about the decommissioning of the voice telephony system (PSTN). In the calculation of Siminn/Míla market share there were about [...] local loops that had no data transfer. One could expect these local loops to disappear along with corresponding [...] copper local loops leased by Vodafone. This was strong indication that this was already happening, as Míla local loops were on a steady decline. A large part of them were precisely local loops that were stripped, i.e., without data transfer.

The position of the PTA

The PTA rejects that it has not taken into consideration the fact that an obligation for non-discrimination rests on the company, both from the PTA, and according to the Settlement between the Siminn Group and the Competition Authority. In Sections 10.3 and 11.3 in the preliminary draft, there was discussion on obligations in force and in Sections 10.4 and 11.4, an assessment was made of the impact of the obligations on the relevant markets. In the light of the extensive potential and real competition problems that were identified on the relevant

markets, see Section 10.2 and 11.2 in the preliminary draft, the PTA considered that it did not suffice to only impose obligations for access and non-discrimination on Míla.

The same may be said about the Settlement between the Siminn Group and the Competition Authority which prescribes an independent board for Míla. That on its own is not sufficient to make it possible to come to the conclusion that obligations for access and for non-discrimination would suffice.

As Míla is a subsidiary of Siminn and in 100% ownership of Siminn, the PTA considers it normal to determine potential competition areas with among other things, Siminn market share. It is in accordance with the BEREC common position from 2014 on geographic analysis and with practice elsewhere in Europe. The PTA points out that in the additional consultation document that was opened for consultation at the end of October 2020, the PTA proposed that the reference level for Siminn market share at retail level would be 50% instead of 40% as allowed for by the preliminary draft. With this change and the change of not applying a specific Míla market share, there was an increase in the number of municipalities included among the areas where more competition pertained, as mentioned before.

The PTA has furthermore, in the revised draft decision (Appendix A) discussed further the possible impact of the decommissioning of the PSTN voice telephony system, along with other factors that could have an impact on a projection for development of Míla market share and that of other parties on the relevant markets during the lifetime of the analysis.

6 Geographical definition of wholesale market for local access with fixed connection (Market 3a)

6.1 General

Míla refers to paragraph 381, where it is stated that one shall assess real competitive conditions that are reflected in the market behaviour of electronic communications companies, for example in their pricing and service offer, and the impact of this behaviour on the structure of the market, for example market share and network deployment. In order to be able to analyse distinct geographic markets there therefore had to be convincing indications, relating both to the structure of the relevant market and to the behaviour of parties to the market, that competitive conditions varied considerably from those in other areas within the state in question.

Míla states that competitive conditions in the Capital City Area are not in any way comparable to locations in the countryside without competition, as the PTA appears to think.

The position of the PTA

The PTA came to the conclusion in its preliminary draft that competitive conditions certainly varied somewhat between those municipalities that belong to areas with little or no competition on the one hand and those areas where more competition prevailed on the other hand. After a detailed assessment, the PTA came on the other hand to the conclusion that real local competitive conditions at wholesale and retail level were not significantly different between these two areas to justify the segmentation of geographic markets, but however, sufficiently different to justify varying obligations.

In further support of this, reference is made to Sections 6 and 7 in the revised preliminary draft (Appendix A) and to answers later in this chapter and Chapter 7 in this document.

6.2 Deployment of networks, deployment plans and network topology

Míla referred to paragraph 396 where it is stated that the Míla copper network covers the whole country, to all households and companies in the country, after having been developed throughout the century long history of the country's state operated telephone system. Subsequent to the monopoly having been lifted, the copper system had also been improved and renewed to be able to meet increased demand for data transfer, in the first instance because of dial-up connection modems and then after that for ADSL and VDSL. Fibre-optic networks had achieved significant distribution during what must be considered a period of relatively few years. In total there are about 81% residences that have access to fibre-optic networks and the distribution to companies is also large.

Míla pointed out that the company was decommissioning its copper network with national coverage and that at many locations there would be no network from Míla to replace it. Míla did not consider it correct to allow for Míla having a network with national coverage

throughout the lifetime of the analysis, as addresses where Míla did not have a local loop were on the increase.

The position of the PTA

It is clear that copper local loops in use have decreased significantly in recent years. They were about 114,000 at the end of 2016 and were about 58,000 at the end of 2020. In the end of 2020, FTTH connections in use with Mila were about 32,500. A large majority of Mila local loops in use are thus still copper local loops or 64%, though the difference is shrinking rather quickly. At the same time, fibre-optic local loops have increased significantly in recent years, both those owned by Míla and by other parties like GR, Tengir and Snerpa. Míla fibreoptic connections will for example increase in this country by about 10,000 in 2020 and reached about 77,000 spaces at the end of 2020, including 64,000 in the Capital City Area. Due to discrepancies in Mila's distribution figures, it is likely that Mila's actual fibre local loop coverage may be somewhat more extensive than the above figures suggest. The company allows for continuing vigorous development of FTTH connections in the coming years, though the company had not been able in October 2020, to provide the PTA with a broken-down distribution projection for the years 2021, 2022 and 2023, and certainly not a projection broken down by municipality, despite repeated criticisms from the Siminn Group about a lack of future projections by the PTA on network distribution. Despite repeated inquiries from the PTA, this information had not been received from Mila at the end of April 2021, not even the expected rollout in 2021. Mila finally made its rollout plans available to the PTA in mid June 2021. Míla has also been purchasing or leasing for long term a number of municipality local networks, that were deployed with state aid or installing these local networks with state aid.

In a Míla reply, dated 22 September 2020, to a query from the PTA dated 7 September 2020, there is a company plan for decommissioning copper over the next 10 years. Míla has now acquainted electronic communications companies with this plan. It was stated that the plan was still subject to a number of uncertainties and that Míla had not been able to predict the number of connected copper local loops in the next years. The current plans are to divide this into 3 main phases, i.e., over the next 5 years, these would be locations where fibre-optic rollout had commenced, was well developed or completed. This should apply to the whole of the countryside (Iceland Optical Connected project), to the Capital City Area and to urban areas to which the above description applies. During the following 5-7 years, there would be locations where fibre-optic rollout had commenced and where there were clear plans in place. This should apply to many urban areas outside the Capital City Area. In the 7-10 years following that, the locations would be urban areas where fibre-optic rollout was very limited, new buildings connected to fibre-optic, but no clear plan yet elaborated. It was then stated that this phasing of the task was presented with reservations and would take into account progress in fibre-optic and 5G rollout in this country.

From the above it is clear that copper connections in use with Míla have been on the decline in recent years, but the company's fibre-optic connections in use have also increased significantly over the same period and the deployment of the company's FTTH networks has increased considerably. One can expect continued development in this direction during the lifetime of the analysis. The above specified plan for decommissioning the Míla copper system is very general and sketchy, and in addition to this, it is presented with reservations.

The PTA considers that Míla will continue to have a local loop network that will cover most of the country and that will be composed of both fibre-optic connections and copper connections during the lifetime of the analysis. As previously stated, Míla has been purchasing or securing long-term control over various local fibre-optic networks that have been deployed by municipalities in the rural areas with the assistance of state aid through the project, Iceland Digital Connected or installing these local networks themselves with state aid.

The PTA expects that during the life of the analysis, Míla will first and foremost close copper connections where the company has already connected with fibre-optic or ensured long-time control over fibre-optic local loops. If Míla does not own or have long term control over fibre-optic local loops at any locations at the end of the lifetime of the analysis, this will, in the opinion of the PTA, be first and foremost in sparsely populated rural areas that will not have an impact on the overall conclusion of this analysis.

Míla refers to paragraph 397 where it is stated that Míla has developed an extensive access network using PON fibre-optic topology and has assured access for itself to the fibre-optic networks operated by other parties, where the company installed GPON equipment for active access service. Míla had also been purchasing or leasing the various local fibre-optic networks in the countryside that had been developed during recent years with financial contributions from the Telecommunications Fund, and also in urban areas such as Gagnaveita Skagafjarðar, which among other things had developed a fibre-optic network at Sauðárkrókur. It was not unlikely that such purchases by Míla would continue during the lifetime of the analysis. Míla furthermore provided GPON service to almost all other local fibre-optic networks in the country (except the GR network). Míla therefore operated in most of the country's municipalities in the field of access through fibre-optic. In footnote 82 under the above specified paragraph, there was a list with the number of local networks that Míla had purchased, leased long term or deployed with state aid.

Míla pointed out that one could understand this list in footnote 82 as though this were a comprehensive network in the municipalities in question. This is not true, as it was rather a list of rural connections in these municipalities. In most instances these networks were very small and only with a few tens of addresses. In the reference list there was some wrong information. It was wrong Míla had purchased leased or deployed countryside systems with the support of a municipality in Hvalfjarðarsveit and Skaftárhreppur. In Langanesbyggð there were 17 addresses which is only a very small proportion of the municipality. Míla has informed Hvalfjarðarsveit that the company would withdraw its offer because of the obligations that the PTA had imposed in this draft decision. Míla was not aware of having purchased the Skaftárhreppur network, as up to this point in time, the municipality's fibreoptic had been deployed by Laki, Orkufjarskipti, Hrafnhóll and Míla. Míla had acquired fibreoptic in Borgarfjörður Eystri. The market analysis would have an impact on Míla plans to purchase more rural networks. Míla did not provide service on the Líf í Mýrdal network as the company had not gained access to that system.

The position of the PTA

In a mail to the PTA, dated 4 January 2021, Mila stated that it had fibre local loops in Skaftárhreppur. The PTA will however correct the text in footnote 82 in the preliminary draft such that Hvalfjarðarsveit is not listed as local networks that Míla had purchased, deployed with state aid, leased long term or deployed with financial support from the municipality in question. Borgarfjörður Eystri will be added to the networks that Míla has purchased but that municipality now belongs to the merged municipality of Múlaþing.

The PTA therefore has information that Mila has purchased the following 16 local networks in part or in full, leased them on a long-term basis, entered into a lease agreement for them or deployed them with financial support from the relevant municipality or electronic communications fund. The connections in question are about 1,600 out of more than 6,000 fibre-optic connections in rural areas of the country: Akrahreppur, Akraneskaupstaður (rural areas), Blönduósbær (rural areas), Borgarfjarðarhreppur, Fjarðabyggð, Grímsnes- og Grafningshreppur, Grundafjarðarhreppur, Húnaþing vestra, Mosfellsbær (rural areas), Skaftárhreppur, Skagabyggð, Skagafjörður, Snæfellsbær, Sveitarfélagið Skagaströnd. In the following 7 additional local networks there is mixed ownership of local loops or that Míla leases long-term local loop networks and operates them: Strandabyggð, Súðavíkurhreppur, Svalbarðshreppur and the rural areas of Langanesbyggð, Vesturbyggð, Vogar (rural) and Grindavík (rural). In total, these are 23 local networks.

In addition, Míla provides GPON services and charges the local loop for the owner of the network for the following 18 local networks: Ásaljós, Fjarskiptafélag Skeiða- og Gnúpverjahrepps, Rangárljós, Húnanet, Orkufjarskipti, Ljósfesti, Hrunaljós, Dalaveitur, Vopnafjarðarljós, Snerpa, Leiðarljós, Flóaljós, GR (Árborg and Borgarbyggð), Fjarðabyggð (part of the network), Bláskógaljós, Hrafnshóll, Ljósleiðari Borgarbyggðar og Skaftárljós. Finally, Mila provides GPON services over 10 local networks, but does not charge for the local loop for the owner of the network in question. They are: Tengir, Eyja- og Miklaholtshreppur, Helgafellssveit, Fjarskiptafélag Reykhólahrepps, Hitaveita Drangsness, Ljóspunktur, Fjarðabyggð, Gagnaveita Hornafjarðar, Hótel Laki and Hvalfjarðarsveit. These are a total of 51 local networks that Mila owns, leases, operates to some extent or provides bitstream services. The PTA expects that this development will continue somewhat during the lifetime of this market analysis, so that more local networks will become the property of Mila or the company leases them.

Míla states that the PTA preliminary draft market analysis of the relevant markets would have an impact on Míla plans for purchasing more rural networks. Subsequent to the additional consultation that was opened at the end of October 2020, the PTA decided to withdraw the intention to impose an obligation for cost analysed prices on Míla fibre-optic, and instead to prescribe an ERT test on the Siminn Group. The PTA considers that such a change would increase flexibility in pricing within the Group. It is for this reason not unlikely that such purchasing, long term lease or deployment with financial support from municipalities will continue during the lifetime of the analysis, as it is difficult for municipalities to be involved in such operations, and it is not part of the statutory role or core operations of municipalities. Besides this, the PTA expects that Míla will extensively rollout fibre-optic to urban kernels in the countryside on commercial terms, with or without the involvement of municipalities or inhabitants of the urban kernels in question.

Míla refers to paragraphs 399-401, where it was stated that at the end of 2019, GR fibre-optic had reached about 102,000 homes and companies of about 140,000 homes and 15,000 companies in the country. In its plans, GR projected that the company's network would reach about 128,000 households and companies by the end of 2020 and about 130,000 at the end of 2021. The Tengir network reached 9000 households and companies and the company expects to increase its distribution, such that this network will reach about 11,000 parties at the end of 2020 and just under 12,000 at the end of 2021.

Míla stated that according to company information, Tengir had deployed to about 10,000 homes and companies by mid-2019. Míla considered that the size of the Tengir system was underestimated in the analysis, both geographically and with respect to the number of homes and companies that it reached.

According to this, these two companies would have about 140,000 homes and companies at the end of 2021. That represents about 92% distribution. In addition to this, rural networks and parties other than Míla would have 2-4%. The remainder would be about 10,000-15,000 homes and companies without fibre-optic from parties other than Míla. Despite the fact that Míla could only offer xDSL in large areas, the PTA considered there to be reason to impose increased obligations on Míla, instead of withdrawing them. Míla objected to these PTA plans.

GR had declared plans for a fibre-optic network with national coverage which should be ready in 2025. Mila had received a presentation of these plans and they had been presented to the Competition Authority. The PTA should be informed of these plans. The GR plans talk of distribution of up to 153,000 in 2025, which was the lifetime of the analysis.

The position of the PTA

In GR replies, dated 22 October 2020, to queries from the PTA dated last 8 and 9 October, it was stated that the company's connections would be 112,000 at the end of 2020, [...] at the end of 2021, [...] at the end of 2022 and [...] at the end of 2023. These numbers were subject to considerable uncertainty, and there was the fact that GR planned to [...], which could increase these numbers on Market 3b. GR says that spaces in the country are [...] in 2020, i.e. [...] homes and [...] companies. Míla considers as stated above, that spaces totalled [...] in the country at the end of 2019, of which [...] were homes. There is quite a difference, about [...], in the Míla and GR numbers of homes and companies in the country.

In the Míla reply dated 25 November 2020 to the PTA query, dated 17 November of the same year, Míla says that the number of homes in the country is [...] and real companies about [...]. Total [...]. The number of registered Míla spaces were however [...], but the company did not consider it appropriate to use the number of registered spaces at any given time to estimate the size of Markets 3a and 3b, particularly with respect to the corporate market. There could be many companies in each space and one company could have many spaces in its operations. The Míla registration would often have additional records, e.g., possibly for lift telephones or security systems. Instead of counting the number of spaces it would be more appropriate if the PTA gathered the number of real connections in use in each individual area. Retail electronic communications companies were perfectly capable of providing the PTA with this information. It was stated that Míla was struggling with the same uncertainty and lack of

precision as the PTA in its counting of corporate spaces. Registering properties in Registers Iceland was the responsibility of each municipality. It was known that this data contained many errors that needed to be corrected. Míla was working on reducing the number of errors in its own systems and on improving processing of that data. Míla allows for the number of spaces increasing by about [...] per annum in the coming years, and then they would be about [...] at the end of 2023.

In PTA's assessment, the number of spaces in the country at the end of 2020, was 163,209. GR distribution was therefore about [...] of spaces in the country at the end of 2020. The number of new connections with GR in the years 2021-2023 is estimated to be rather small on the basis of development in recent years and does not reach the 130,000 connections that Míla mentions that GR aims for at the end of 2021, and GR allows for as seen here above, that the company's distribution will reach [...] spaces at the end of the lifetime of the analysis at end of 2023.

Míla stated that the Tengir network had reached about 9000 spaces at the end of 2019 and that it would reach 11,000 at the end of 2020 and 12,000 at the end of 2021. In the Tengir reply, dated 6 October 2020, to a query from the PTA, it was stated that the Tengir fibre-optic network had reached [...] spaces on 1 October 2020. The PTA considers that there is some overestimation on the part of Tengir, because the PTA infrastructure database, which is based on figures from Tengir, assumes that the distribution of Tengir's fibre network was around 9,500 spaces at the end of 2020. It was projected that the number would be [...] at the end of 2021, [...] at the end of 2022 and [...] at the end of 2023. This was about [...] distribution at the end of 2020 and the projections are rather modest for the coming years. In total, the fibre-optic networks of GR and Tengir reached about [...] of spaces at a national level at the end of 2020. This is about 119,000 spaces and is projected that they will be just under [...] at the end of 2021, and not 140,000 as stated by Míla. This would not be 92% distribution, as stated by Míla, but about 76%, considering that the annual increase in total spaces is estimated at 3,000 per year.

At the end of 2020, Snerpa had deployed FTTH connections to 1,177 spaces in 3 municipalities in the West Fjords, i.e., in Ísafjarðarbær, Bolungarvíkurkaupstaður and Tálknafjarðarhreppur. The company reckons that connections, roughly estimated, will be about [...] at the end of 2021, [...] at the end of 2022 and [...] at the end of 2023. At the end of 2020 Austurljós had deployed fibre-optic to about 200-300 spaces at Egilsstaðir, where there were about 70 subscribers. The Austurljós plans for the coming years are rather modest and will be decided by demand. It should be noted that Míla has also deployed fibre-optic at Egilsstaðir, just over 600 spaces in the autumn of 2020, in addition to which Míla has continued fibre development in the town in the summer and autumn of 2021.

In addition to this one can add fibre-optic networks of rural areas, where about 6,000 addresses in rural communities have received state support. According to the PTA's infrastructure database, there were only around 3,000 addresses ready for connection. The PTA expects that more will be added during the lifetime of the analysis. Míla has also purchased a number of these networks or secured long-term control over them, or deployed them with state aid, so this figure is significantly reduced. That number is at least 1,600 and the PTA expects that Mila will increase its share there during the lifetime of the analysis. Therefore, it can be assumed that the number of connected spaces still owned by parties other

than Míla, is about 123,000 at the end of 2020, which is approximately 75%. At the end of 2021, this would be 128,000 spaces or about 77% distribution. Míla states that there would then be about 10,000-15,000 spaces without fibre-optic from parties other than Míla at the end of 2021. It would be correct to say that those spaces would be about 30,000-40,000 if calculated according to PTA figures on the number of homes and companies, taking into account the likely increase in the population during the period.

Given the newest plans from GR for rollout of fibre-optic networks, it is not expected that the company will have a fibre-optic network with national coverage during the lifetime of the analysis, and nowhere approaching this, if one considers distribution by region.

Míla refers to paragraph 412 where it is stated that the requirement in common for local networks that have received state aid is that they are subject to an obligation for open access to their networks on Markets 3a and 3b, and that access prices to the networks shall be based on benchmarking. It was therefore clear that such networks bore various obligations that did not rest on parties that had not received state aid or that had been designated as having SMP. It was therefore clear that there was less likelihood of competition problems arising from the operations of such networks than from networks that do not bear obligations.

In Míla's submission it was stated that there were areas where there should be no obligations on Míla, i.e., the networks that Míla had not purchased. On these networks, Míla would not own the infrastructure, and therefore unreasonable to maintain obligations on Míla in such areas.

The position of the PTA

The PTA notes that there will certainly not be obligations on Míla on Market 3a for fibre-optic networks that are not owned or under long-term control by the company. Obligations on the other hand apply to fibre-optic networks owned by parties other than Míla on Market 3b, if Míla owns and operates bitstream equipment on such networks. Then there will be an obligation on Míla copper networks in such areas, where such networks are in place. The PTA reiterates that these are small and little populated networks that do not matter much in the broader context of this market analysis. If one subtracts the rural networks that Míla has purchased or over which Míla has ensured long term control, one may assume that they will be about 2-3% of the total number of local loops in the country.

Míla refers to paragraph 413 where it is stated that a number of municipalities or residents had deployed fibre-optic without public funding, e.g., Hvalfjarðarsveit, Skeiða- og Gnúpverjahreppur and Fljótsdalshreppur. The above three municipalities had in common, for example, income from power stations located in those municipalities. Míla has now purchased the Hvalfjarðarsveit electronic communications network subsequent to a bid for tenders. Further to this, the electronic communications company Snerpa, which operated in the West Fjords, had commenced deployment of fibre-optic in the West Fjords e.g., in Ísafjörður and Bolungarvík, and in more towns and villages in the area. This development was in the early stages and it was not expected to make great progress during the lifetime of this analysis.

Míla stated that the company had not purchased the Hvalfjarðarsveit fibre-optic system. Also, that the access network was significantly underestimated, according to Míla information. Snerpa offered Míla access to over 1000 homes over fibre-optic in the West Fjords and seemed to aim at expanding its network further in the coming years. According to the media, Snerpa has made an agreement with Bolungarvík municipality on the deploying of fibre-optic in rural and urban areas which should be completed in 2022. The Snerpa development territory in the West Fjords reaches from Bolungarvík to Tálknafjörður and there were many instances of agreements between Snerpa and municipalities. Discussion was also lacking on Kapalvæðing in Reykjanesbær.

The position of the PTA

The PTA will correct the assertion that Míla purchased the Hvalfjarðarsveit fibre-optic network. An agreement was reached between the parties, but Míla says that it has decided not to sign because of the preliminary assessment of market analysis which the PTA published for consultation on 30 April 2020.

The Snerpa fibre-optic network reached 1,177 spaces at the end of 2020 and it is planned that it will reach about [...] spaces at the end of 2021, [...] at the end of 2022 and [...] at the end of 2023. Most connections are in Ísafjarðarbær, and some in Bolungarvíkurkaupstaður, Súðavíkurhreppur in Vesturbyggð (Bíldudalur) and in Tálknafjarðarhreppur. The PTA does not consider this development to be extensive, when one considers the country as a whole, under 1%.

Kapalvæðing in Reykjanesbær operates a small FTTH fibre-optic network belonging to the relevant market in Reykjanesbær together with a cable system that is not covered by the relevant wholesale markets, as the PTA explains in more detail in the revised preliminary draft (Appendix A) and at another place in this document. The company's fibre optic network reached 749 spaces out of 8,762 spaces in Reykjanesbær at the end of 2020 (8.6%). The company's customers on that network were only [...] at the end of 2020.

Vodafone referred to paragraph 416 and pointed out that there were optical splitters at many locations in node points/telephone exchanges.

The position of the PTA

In the referenced paragraph, the PTA describes the network topology that is generally appropriate. Though in some instances in the Míla fibre-optic local loop network, where connections are in place close to node points/telephone exchanges, there is an optical splitter in the telephone exchange and a continuous thread from there to a home or company, this does not change the fundamental topology of the general Míla fibre-optic local loop network which is built with PON topology. These facilities-related deviations are exceptions.

Siminn considered it to be unthinkable that one could maintain that market conditions were sufficiently homogeneous across the whole of Iceland for it to be one and the same market. This applied, regardless of the sale level. One of the most important issues in operations and investments in fibre-optic systems was building density and the number of apartment

buildings. If costs varied, this was an indication of separate markets. In the same way, economic grounds for fibre-optic deployment varied. The PTA had not investigated that.

For this reason, it was appropriate to describe geographic delineation in Iceland and the significance it had for development of electronic communications service. Information from the turn of year 2018/2019 was used as a reference, because all information about breakdown of inhabitants by urban area was not available for the turn of year 2019/2020. This actually should not have made any difference. The data was acquired from Statistics Iceland and from Registers Iceland.

The total number of inhabitants in the country was 356,990 at this point in time and the total number of apartments 140,600.

Most of the country's inhabitants live in the *Capital City Area*, 228,231, and of them only 1% lived in a rural area. The number of apartments was 87,934. The proportion of inhabitants in this area was 64% of the country's total population. It is not disputed that from a marketing and geographic point of view, the area differed from all other market areas. The proportion of single dwelling buildings of all dwellings was 25%. The area was the smallest region in the country. In order to be able to operate at retail level and achieve satisfactory profitability, it would suffice to have one's operations on this market.

In *Reykjanes* there were 27,112 inhabitants, of whom 144, lived in a rural area, about half a percentage point. The number of apartments was 9,967. The proportion of inhabitants in this area was 8% of the total and the proportion of single dwelling buildings was 44% of dwellings in the area.

In West Iceland there were 16,507 inhabitants, of whom 15.6% lived in rural areas. The proportion of inhabitants was 5% of the total and the proportion of single dwelling buildings was 60% within the area.

In the West Fjords there were 6,614 inhabitants, of whom 10.4% lived in rural areas. The proportion of inhabitants was 2% of the total and the proportion of single dwelling buildings was 64% within the area.

In North West Iceland there were 7,676 inhabitants, of whom 30.1% lived in rural areas. The proportion of inhabitants was 2% of the total and the proportion of single dwelling buildings was 60% within the area.

In North East Iceland there were 30,445 inhabitants, of whom 11.3% lived in rural areas. The proportion of inhabitants was 9% of the total and the proportion of single dwelling buildings was 51% within the area.

In East Iceland there were 13,059 inhabitants, of whom 14.1% lived in rural areas. The proportion of inhabitants was 4% of the total and the proportion of single dwelling buildings was 69% within the area.

In South Iceland there were 27,346 inhabitants, of whom 20.2% lived in rural areas. The proportion of inhabitants was 8% of the total and the proportion of single dwelling buildings was 73% within the area.

From the above, one could conclude that the Capital City Area was unique and not like any other area with respect to population density, with a small proportion of detached dwellings.

There was a significant difference between the larger urban areas and the smaller urban areas. Circumstances, in smaller urban kernels could change very quickly in a short space of time, where very few customers could alter the share statistics very quickly.

It was undisputed and generally accepted that the cost of deploying a fibre-optic system depended on population density. In the EU Commission guidelines on state aid in Telecom, the following is stated among other things:

"Due to economics of density, the deployment of broadband networks is generally more profitable where potential demand is higher and concentrated, i.e., in densely populated areas. Because of high fixed costs of investment, unit costs increase significantly as population densities drop. Therefore, when deployed on commercial terms, broadband networks tend to profitably cover only part of the population."

The PTA had not investigated this aspect and needed to conduct such an investigation in order to assess varying conditions, and whether the proposals made by the Administration were conducive to encouraging fibre-optic deployment, or prevent it, where fibre-optic was lacking.

FTTH Council had made many studies that discuss this issue. This was significant because the PTA appeared to maintain that it cost just as much to deploy fibre-optic infrastructure in the Capital City Area as outside that area. This was also significant with respect to the assessment of how likely it was that Míla would deploy fibre-optic where Tengir had deployed fibre-optic and, where GR had deployed fibre-optic (mostly detached dwellings remaining in the GR operational territory).

The Institute of Regional Development has information about population density and the PTA could call for this information from that source.

An investigation of this kind would reveal very differing costs per dwelling that reflected the very significant cost difference between areas. It would then be the role of the PTA to delineate the areas to be defined by borders, i.e., how many dwellings did an urban area need to have to make deployment of fibre-optic feasible, and whether it was realistic to deploy two parallel fibre-optic systems. Competitive conditions and appropriate measures would then be assessed on the basis of these criteria. The PTA had not done that and did therefore not succeed in assessing the needs of the market at appropriate locations, neither those of consumers nor of retail electronic communications companies.

Of 99 urban kernels, there was only one kernel with 220,000 inhabitants, two with 18,000, two in the range of 7000-8000, two in the range of 3000-4500, 7 with 2000-3000 inhabitants, 12, in the range of 1000-2000, 14 in the range of 500-1000, and the rest under 500. A large proportion of smaller urban kernels did not have fibre-optic, unlike the larger urban kernels.

It would have been useful, and in fact necessary for the PTA to investigate which urban kernels had fibre-optic connections and the proportion of urban populations and the status in varying urban areas. In this way, looking at an average of a specific municipality instead of the relevant urban kernels, provided misleading information about the real situation. A postcode or urban kernel would be a more appropriate measure, as post numbers were normally a better measure of the status between urban and rural areas than municipalities were.

GR, for example had 100% distribution at Hella and Hvolsvöllur, which were only about half of the relevant municipality, i.e., Rangárþing Ytra and Rangárþing Eystra, which were very much rural populations. According to the PTA metrics, GR had 50% distribution in the municipalities which means that incorrect obligations were imposed on the municipalities as a whole, when the reality was rather that GR had a very strong position in the urban kernels in question and did not intend to deploy in rural areas. This clearly led to a wrong assessment of the situation by the PTA, both with respect to rural areas and urban areas.

With the above in mind, density of population, proportion of multiple home buildings and single home buildings and the cost of providing service, were indisputably, issues of importance in the assessment of whether competitive conditions were comparable. This was particularly significant with respect to the relevant wholesale markets. It could also be significant with respect to assessment of the extent to which 5G service was a substitute service.

The position of the PTA

The PTA comes the conclusion, after detailed geographic analysis, that competitive conditions are not sufficiently different between municipalities with little or no competition on the one hand, and areas with more competition on the other to justify geographic segmentation in this country on the relevant wholesale markets. The same can be said about the related retail market. In this connection one can refer to paragraph 593 in the preliminary draft. It is stated there among other things that though there is a certain difference in market structure between the two areas in question, among other things with regards to deployment of the fibre-optic networks of Míla competitors and with regards the market share, this difference is not in the form of variations in price, quality, service offer and other aspects that should affect consumers if competitive conditions varied significantly between areas. The competitive pressure faced by Míla is thus not sufficiently different between these two areas on the relevant market to be considered significant.

Siminn pointed out that one of the most important issues in operation and investments in fibre-optic systems was population density and the number of apartment buildings. If costs varied, this was an indication of separate markets. In the same way, economic grounds for fibre-optic deployment varied. The PTA had not investigated that. The PTA does not agree that varying costs for deploying electronic communications networks between areas or population density sufficed on their own to come to the conclusion that markets should be geographically segmented. Such a difference in cost needs to be reflected in significantly differing competitive conditions between areas that the consumers perceive. For example, it is stated in the BEREC common position from 2014 with respect to geographic analysis that it matters whether, for example, there is a price difference between areas at wholesale level as a result of varying costs with deployment of networks or as a result of varying competitive conditions between areas. As is explained further here below, the PTA considers that varying Míla wholesale prices between areas is explained first and foremost by varying costs in deploying and operating networks.

In a reply dated 22 September 2020 to a PTA query about what explained that the price difference for Mila fibre-optic between urban and rural areas on Market 3a was 17% against about 67% on Market 3b, it was stated among other things that Mila installed ONT at its own

cost, regardless of where in the country the service was offered. By the nature of things, it was considerably more expensive to visit a customer in the countryside. Installation of ONT was part of bitstream service. This factor weighed heavily in the reasons for A1 service being more expensive in locations other than in the Capital City Area and Akureyri. In connection with the percentage difference of fibre-optic and bitstream in these areas, the main reason was that usage of fibre-optic lines was much better than usage of bitstream equipment. Míla can only conclude that this reply from Míla confirms the above position taken by the PTA, i.e., that the price in question is explained first and foremost by varying costs for deployment and operation of networks by area, rather than being a consequence of more competition in more densely populated areas.

Then Simin describes at length, "geographic delineation" in this country, as the company sees it, and the significance it had for development of electronic communications service in the opinion of the company. There one can find discussion on the various areas with respect to number of inhabitants in each area, the proportion between urban and rural, the proportion of the total population of the country and the proportion of single dwelling buildings of all dwellings within each area. The areas discussed by Siminn were 1) the Capital City Area, 2) Reykjanes, 3) West Iceland, 4) The West Fjords, 5) North West Iceland, 6) North East Iceland 7) East Iceland and 8) South Iceland. According to the Siminn analysis, the Capital City Area was unique and unlike any other area with respect to population density and small proportion of single dwelling buildings. Circumstances, in smaller urban kernels could change very quickly in a short space of time and a very small number of customers could change the market share statistics very quickly. It was undisputed that the cost of deploying a fibre-optic system depended on population density. The PTA had not investigated this aspect and needed to conduct such an investigation in order to assess varying conditions, and whether the proposals made by the Administration were conducive to encouraging fibre-optic deployment, or preventing it, where fibre-optic was lacking. This was significant because the PTA appeared to maintain that it cost just as much to deploy fibre-optic infrastructure in the Capital City Area as outside that area. Among other things, the PTA needed to assess how likely it was that two parallel FTTH networks would be deployed and in which areas. Then it was stated that postcodes or urban kernels would be more appropriate measurements of the situation between urban and rural areas than the municipality boundaries, see for example Hella og Hvolsvöllur. It could also be significant with respect to assessment of the extent to which 5G service was a substitute service.

The PTA based its methodology on geographic analysis of the relevant markets and on among other things, appropriate ESA guidelines and recommendations and on the BEREC common position on geographic analysis. This applies among other things, to the choice of areas for analysis. On the one hand, Siminn appears to be proposing that the areas to be analysed are the above specified 8 geographic areas, while on the other hand that postcodes should be used, but there are more than a hundred of them. As is covered in detail in Section 6.4 and 7.4 in the updated preliminary draft (Appendix A), the PTA considered it most appropriate to select on the basis of municipalities that fulfil given conditions, in accordance with the guidelines referenced here above, and in accordance with practice in other European states. More detailed information will be provided on choice of areas for analysis later in this document. It is worthy of note that after the changes that were announced in the additional consultation that was opened in October 2020, all municipalities in the Capital City Area, along with a

number of other municipalities in the countryside belong to areas where there is considered to be more competition. These are 17 municipalities out of 69, where about 70% of the population lives. On the other hand, the PTA considered that competitive conditions between these areas and the areas with little or no competition was not sufficiently different to justify segmented geographic markets, and that there was only reason to apply differing obligations between these two sets of area.

Population density, the proportion of single dwelling buildings as opposed to apartment buildings or the cost of deploying fibre-optic networks are not factors that should be taken into account in isolation, but rather such factors that reflect significant differences in competitive conditions that relate to the structure of the market and varying behaviour of parties to the market, e.g., pricing, quality of service and service offer. The investigation that Siminn asks that the PTA conduct in connection with the above specified comment is more in the remit of the administration responsible for the execution of rules for state aid. Nowhere does the PTA assert that it costs as much to deploy fibre-optic in urban areas, as in rural areas, as this is not the case. About 6000 addresses in the most sparsely populated regions of the country, within the specified municipalities, have received state aid for fibre-optic rollout. There are still almost 30,000 spaces remaining in the country's villages that do not have access to fibre-optic local loops. It still has to come to light in the coming years whether commercial terms exist to complete deployment, or whether further state aid is needed. The PTA market analysis is not the proper place to make decisions on that. By reversing the intention to impose an obligation on Míla for cost-analysed prices for the company's fibreoptic, and applying instead an ERT obligation, the PTA has definitively made concessions to the Siminn views on roll-out of fibre-optic networks.

With respect to the conditions that could change rapidly, in smaller urban kernels, then this is correct as far as it goes. The PTA revised market analysis draft allows for annual review of the list of municipalities that are classified as having more competition and thus lighter obligations. In this way the PTA systematically reacts to changed conditions from year to year.

The PTA has furthermore requested distribution plans from the three mobile phone companies for 5G. Replies from the companies have been very general and short and very little can be concluded from them with respect to potential development of distribution of 5G in this country during the lifetime of the analysis. There seems to be great uncertainty about such potential distribution. Reference is made for further detail on potential substitutability between fixed networks and mobile networks to Sections 3 and 4 here above, to the same sections in the revised preliminary draft (Appendix A) and to Appendix C, where there is discussion on the above specified additional consultation.

The Siminn assertion that postcodes are more appropriate metrics than municipalities are referred to the PTA reply on this issue later in this document. The PTA, furthermore, disagrees that urban kernels within municipalities provide more appropriate metrics, as they are not administrative units in themselves, but it is rather than municipalities themselves that are.

Siminn said there had been a lack of PTA investigation with respect to supply of fixed line systems in varying areas.

With respect to the Capital City Area, it was established that fibre-optic had been rolled out at all locations by one company, GR. Another fibre-optic system had been deployed by Míla at many locations in the area, but that company was subject to a variety of obligations from the PTA and Competition Authority. In this way the supply of Internet service by fibre-optic was widespread, 100% in the case of GR, but rather lower in the case of Míla as districts with single dwelling buildings were prominent in the areas that lacked fibre-optic from Míla. Siminn consider it clear that the majority of inhabitants in the Capital City Area had Internet service over fibre-optic. Supply service in the whole area was homogeneous and significantly different from other areas where fibre-optic had not been rolled out as extensively. GR and Míla offered service in all areas. Both companies offer bitstream service, GR, through its fibre-optic and Míla through fibre-optic and xDSL. Siminn, Vodafone, Nova and Hringdu offered service in the area, as do other small parties like Hringiðan, and the University of Iceland also offered Internet service to staff and students that needed to be investigated.

At *Reykjanes*, fibre-optic was in the development stage in the urban areas of Keflavík and Njarðvík (Reykjanesbær). GR had already deployed fibre-optic to about 10-15% in the urban areas but nothing to other urban areas at Reykjanes and nothing, in rural areas. GR had plans to deploy fibre-optic in the Vogar municipality, but not to other municipalities in the area. Míla had deployed fibre-optic to some extent in the area. Kapalvæðing also offered service in Reykjanesbær through a cable system and as far as can be determined, Kapalvæðing has about 15-20% share there and 0% elsewhere. The precise distribution of the system or related plans were not known. This was an area where offer of service was different from other areas, and there was a significant difference between adjacent areas in the Reykjanes region. This meant that there were 3 parties that offered service through their own systems in the municipality. GR would complete its plans in the coming 2-3 years and after that, just under 7000 inhabitants at Reykjanes would only have access to xDSL service. It may have been an exaggeration that GR intended to conduct fibre-optic rollout in other municipalities at Reykjanes.

With respect to *West Iceland*, the largest urban areas, Akranes and Borgarnes had 100% fibre-optic from GR and an insignificant offer of fibre-optic from other parties, and about 57% of inhabitants of the area live in these two urban kernels. About 2500 inhabitants were in rural areas, many of them probably having access to fibre-optic through the Iceland Digital Connected project, but there remained approximately 4000 inhabitants, many of whom only had access with xDSL service and did not qualify for the Iceland Digital Connected project. In this way, Borgarnes and Akranes were separate markets as their service offer was different from other areas, but part of the GR area. It cannot be seen that the PTA has assessed development or changes in supply of services in the area. This constituted lack of investigation.

The West Fjords comprises a number of urban kernels, most of which only have xDSL access, although fibre-optic has been deployed to some extent. The PTA analysis does not, on the other hand, show distribution there, as the PTA used the whole country first and foremost which meant that it was difficult to analyse the status on the market in the area in question, among other things because official information was not available for parties operating in the area, such as e.g., Snerpa. Geographically speaking, the West Fjords was a significant challenge with respect to cost in deploying fibre-optic, and the PTA could have analysed the

area with respect to how supply of service would develop in the coming years in the main urban kernels in that region. This had not been done and constituted a lack of investigation.

North West Iceland was that part of the country that had proportionately the largest number of inhabitants in rural areas, but fibre-optic distribution was on the other hand, quite widespread, among other things on the basis of fibre-optic rollout by municipalities and that supported by Iceland Digital Connected. Fibre-optic systems in the area were variously owned by the municipality in question or by Míla, and Míla also had an xDSL system in the area. Offer of service varied across the area.

North East Iceland was the next largest market area, and the area was to a large extent served by fibre-optic from Tengir, but only to a small extent from Míla. Contiguity of the Tengir fibre-optic system was much more than in neighbouring regions to the west and east, which meant that supply and uniformity of the fibre-optic offer differed sufficiently to be deemed to have different competitive conditions. In the opinion of Siminn, it was actually enough to indicate a difference in the proportion of Míla connections in the area compared with neighbouring areas in order to categorically state that these were separate markets. As this was an obvious fact, Siminn considered it unprofessional of the PTA to ignore an obvious difference in offer. The PTA furthermore appears not to have made any assessment of the probable plans of others in the area and of whether there was a likelihood that the Míla offer of fibre-optic connections in the area would increase during the coming 2-3 years. Tengir offers fibre-optic to 9000 homes and would expand its system up to 11,000-12,000 homes in the coming 2-3 years. Tengir would be that party in the area that other parties needed access to in order to offer fibre-optic service. Both Míla and Tengir offer bitstream through the Tengir system. There was no evidence that Vodafone offered other electronic communication companies bitstream service through the Tengir system, but there was nothing to stop Vodafone from doing that.

East Iceland is e.g., somewhat different from other areas, as there has been relatively little investment in fibre-optic, which is possibly explained by the fact that it would be a significantly costly project. Supply of fibre-optic service was totally different when compared to North East Iceland, which should be enough to state categorically that these were not the same market area. The Tengir share was insignificant, and GR had no operations in the area. Similarly, the Míla share was rather high, but this was xDSL service that could change rapidly if the state were to become involved in a project in the area. It could also have an impact, if a party were to develop 5G service in the area, but the PTA has not investigated this and therefore has no information about it. It was undisputed that the supply of service in the region was quite different from neighbouring regions. Siminn considered it to be foreseeable that the PTA proposals would lead to even further delays in built up areas in East Iceland gaining access to fibre-optic connections. Siminn's experience was that fibre-optic service had a far lower fault frequency than xDSL service, which is very important when distances between companies, operational premises and service area were great, as is the case in East Iceland. It was therefore most likely that fibre-optic to the home would reduce costs for providing service and thus awaken interest in new parties to provide service. The PTA should rather work towards fibre-optic being deployed than preventing it, which would be the result of PTA proposals.

South Iceland was an area with fragmented distribution of fibre-optic, which would however achieve contiguity in the coming years, when Míla and GR completed deployment of fibre-optic in the Árborg municipality. Today, the Ölfus and Hveragerði municipalities had 100% distribution of fibre-optic from GR. Árborg would achieve that within 2-3 years. Many municipalities in the area had taken advantage of the Iceland Digital Connected project, and municipalities like Skeiða- og Gnúpverjahreppur had themselves deployed fibre-optic and offered passive access through their systems. GR had taken part in a number of such projects in the area and offered passive access to the system. GR had also deployed fibre-optic at Hella in Rangárþing ytri and at Hvolsvöllur in Rangárþing eystri, but not in the rural areas of the municipalities in question. The situation is that fibre-optic is widely on offer and market conditions varied greatly between areas in South Iceland.

Taking the above into account, there was a significant difference in service offer between geographic areas, which the PTA appears to choose to ignore in its analysis. The whole country was far from being sufficiently homogeneous, as the status for example between Tengir operational territory, GR operational territory and of other geographical areas, clearly showed. East Iceland was indisputably unlike other regions, with respect to service offer and infrastructure. There was a significant difference between competition in the operational areas of Tengir and GR. This meant that they were separate markets.

The position of the PTA

The PTA does not agree that the Administration's investigation was lacking with respect to the offer of fixed line connections in varying areas. The PTA has statistics on the offer of fibre-optic connections of all parties that offer such connections in this country, broken down by municipalities.

The PTA believes that the above specified division by Siminn by geographic areas, i.e., the Capital City Area, Reykjanes, West Iceland, West Fjords, North West Iceland, North East Iceland, East Iceland and South Iceland is not admissible for a choice of areas for further analysis, and nor is it possible to use specific urban kernels within specific municipalities as a basis, in these regions. These are not administrative units as municipalities are. Siminn actually admits that the status varies within the areas in question with respect to distribution of electronic communications networks.

It is incorrect when Siminn says that the PTA chooses to ignore the difference in the offer of service or distribution of electronic communications networks in its analysis. The PTA examines this precisely on the basis of municipality borders and thus endeavours to aggregate those municipalities into one area where competition is more with respect to at least 75% distribution of a fibre-optic network of a party other than Míla and where the Siminn market share at retail level is below 50%. This is a recognised methodology on the basis of the above specified guidelines and recommendations from ESA and of the BEREC common position on geographic analysis from 2014, and it furthermore aligns neatly with competitive conditions in this country in the opinion of the PTA, as is explained in more detail later in this document.

It was however the conclusion of the PTA, after detailed geographic analysis that competitive conditions within this area where there was more competition on the one hand were not significantly different from competitive conditions in areas with little or no competition on

the other, to the extent that it would justify the segmentation of the two previously referenced areas geographically. On the other hand, the PTA considered there to be reason to apply varying obligations between these two areas.

6.3 Choice of areas for analysis

Míla referred to paragraph 425 where it was stated that after having analysed the geographic areas, the next step was normally to group those areas with similar competitive conditions. The areas were generally grouped into areas where there was significant or some competition on the one hand and on the other hand, areas where there was less or even no competition. Varying criteria could be used for such grouping. On Market 3a, the most common criteria used were on the one hand that a specific number of competitors of the potential SMP operator had begun to deploy their own infrastructure above a specific level (at least the networks of two parties in addition to the network of the potential SMP operator) and on the other hand that the market share of the potential SMP operator had fallen below a specific level in the retail market. In the European states, the distribution condition ranged generally from 50-75% and the condition for market share of the SMP operator on the retail market variously 40% or 50%.

In Míla's submission, it was stated that the PTA was here comparing obligations in countries where many millions of inhabitants lived with the circumstances in Iceland, which could be considered a micro market in comparison with other countries in Europe. The PTA was also comparing circumstances where the regulated companies competed with cable companies and not with parties with their own fibre-optic network. Míla considered that it was not possible to compare the circumstances in Iceland with the circumstances on such a market.

Míla also considered that it was not possible to make the same demands for the number of infrastructure competitors when it was clear that because of the small size of the market and the high number of buildings with few dwellings, market conditions were such that such a number of fixed line systems would never be profitable unless line charges were significantly higher than now. Míla considered that the circumstances that the PTA appeared to demand for lifting obligations, i.e., 3 fixed line companies and that Siminn was below 40% in market share, were not realistic in the Icelandic environment. This demand meant in reality that the PTA would never lift obligations from the market because on duopoly markets it was clear that one party always had over 50% market share. Míla considered that under such circumstances, there was sufficient competitive pressure to justify at least the lifting of price control obligations, particularly when taking into account the fact that GR had a much higher market share of the fibre-optic market and had therefore every capability to perform well in competition. GR controlled a comprehensive fibre-optic system, unlike Míla, which had a long way to go to reach the same distribution as GR, and it was in fact unlikely that Míla would embark on such development in the GR market territory.

Míla pointed out that the criteria that the PTA intended to use for networks of other parties, were stricter than the examples that Míla had found for 75% distribution. In Denmark, the criterion was 75% homes and not homes and companies as the PTA appears to intend to use. Míla pointed out that with this, addresses were being included that were on Market 4 and

which should therefore not be included. Data on company spaces were very poor and simply wrong. The PTA seemed for example, in some instances to have many more company spaces in its analysis than Statistics Iceland indicated.

The position of the PTA

It is certainly true when Míla says that the electronic communications market in Iceland is small in comparison with most states in Europe. There one can however find states that are comparable to Iceland in size, such as Luxembourg and Malta, and states have populations that are not much larger, such as Cyprus, Estonia, Latvia and Lithuania. Lichtenstein is also a much less populated country than Iceland.

There is no hard and fast rule in EEA states as to whether there are cable companies operating or not. Where they are in place, the extent of their distribution is also very unequal and the extent to which they provide SMP operators with competitive pressure. Then the cable companies have generally not been considered to belong to Market 3a, and there are various examples of them having been considered to belong to Market 3b and related retail market.

As has been stated in the PTA analysis, there are no known examples where a network of one competitor of the SMP operator has been considered adequate to segregate geographic markets on Market 3a. There are a very few known examples that this has been considered sufficient on Market 3b, such as in Portugal. When the last analysis of the relevant markets was made in that country, circumstances were however significantly different from circumstances on the relevant markets here in this country today. In Portugal, the NRA in that country placed great emphasis on developing infrastructure competition by imposing wide reaching obligations on the SMP operator in that country with respect to access to ducts and conduits, and for related transparency and non-discrimination. The SMP company in that country had hardly commenced fibre-optic rollout in 2016.

The PTA furthermore agrees with Mila that it could be unrealistic to assume that a network of more than two parties, including the Mila network, was realistic in this country. And in some areas, there was even only one network. Though the conclusion of the PTA geographic analysis had in this instance been such that there was not considered to be a reason to segment markets geographically, as competitive conditions were in the opinion of the PTA not sufficiently heterogeneous between areas, this does not mean that such a position could not arise in the future in this country, despite there being only two parallel networks, but for this, the competitive conditions between areas must be sufficiently different that the consumer perceives a tangible difference between areas, e.g. in prices, quality, service offer, demand, etc. In the opinion of the PTA this is not the case as it stands in this country, and nor is it the assessment of the PTA that this will be the case during the lifetime of this analysis.

The PTA therefore does not make the demand that at least 3 networks are needed under all circumstances to be able to come to the conclusion that a market should be segmented geographically. It depends first and foremost on whether it is possible to determine significantly heterogeneous competitive conditions between the areas. The existence of 3 networks would however without doubt make this more likely. The PTA however considers that competitive conditions are somewhat different between the areas with more competition on the one hand and the areas with little or no competition on the other, such that varying obligations are justifiable. Subsequent to the additional consultation opened at the end of

October 2020, the PTA decided to prescribe that the criterion for Siminn retail market share should be increased from 40% to 50%, and this means that more municipalities will belong to the area where it is considered that there is more competition and lighter obligations will apply than was the case in the PTA preliminary assessment, or 17 instead of 6.

Míla considers that circumstances in this country are such that there is sufficient competitive pressure, among other things in many of the municipalities where GR and Tengir operate, to justify at least the lifting of obligations at those locations. The PTA draws attention to the fact that subsequent to the above specified additional consultation, the PTA decided to retract the imposition of obligations for cost analysed prices on the Míla fibre-optic network on the relevant markets and prescribe instead that the Siminn Group needed to withstand an ERT test, which is a lighter measure than an obligation on cost analysed price. ERT is often categorised as a non-discrimination obligation, as it is intended to ensure that competitors of the retail arm of the network operator are as well placed as the retail arm with respect to possibilities of price competition. The ERT obligation constitutes specific monitoring of prices, but not cost analysed wholesale tariffs. This change provided the Siminn Group with more latitude with respect to pricing than the obligation mentioned above on cost analysed prices.

Because in this country there are generally only two parallel networks (and in large and sparsely inhabited areas, only the Míla network), the PTA considers that the condition for 75% distribution of a network other than that of Míla is justifiable and in accordance with proportionality. The PTA rejects that it is including connections that belong to Market 4 in this calculation. The PTA has furthermore, subsequent to consultation on the preliminary draft, gathered more detailed data on the number of spaces, i.e., both homes and companies that use home connections. The revised draft decision (Appendix A) takes into account these more detailed data. On the other hand, the PTA decided subsequent to the above specified additional consultation, to increase the threshold for Siminn market share at retail level from 40% to 50% and to refrain from applying the condition that Míla should be under a specific market share at wholesale level on Market 3a, and the latter condition was not on Market 3b in the preliminary draft. In this way the PTA was however not excluding the possibility of the eventuality that a specific market share could be prescribed for Míla at some time in the future, should competitive conditions give reason to do so.

Míla referred to paragraph 426, where it was stated that in the BEREC common position from 2014, it had among other things been stated that the main parts of geographic analysis constituted demarcation of appropriate geographic areas and assessment of competitive conditions. NRAs were generally faced with two situations in such a task.

Scenario 1: Access that is based on wholesale obligations (local loop lease, bitstream access, resale) is an important source of competition on the retail market, as appropriate with the addition of the existence of electronic communications networks operated by competitors of the incumbent SMP operator in specific areas (e.g., FTTH/FTTB network, cable system, mobile network or WiFi system). These networks then needed to be capable of providing comparable service to the traditional copper network.

Scenario 2: The above specified access obligations were not an important source of competition on the retail market, but rather first and foremost the existence of electronic

communications networks operated by competitors of the incumbent SMP operator (first and foremost where coverage of competitor infrastructure was substantial).

Míla considered that Scenario 2 applied to the areas where GR and Tengir had developed their fibre-optic systems. Míla considered that the PTA had not divided the country correctly, taking into account the scenarios. Where there were networks of Míla competitors, service providers had in general chosen to use them. Imposing obligations on Míla in such areas would therefore have little impact on their opportunities to reach end users and the distribution of such networks was considerably less than the Míla network. An example of such companies was e.g., Nova and Vodafone.

The position of the PTA

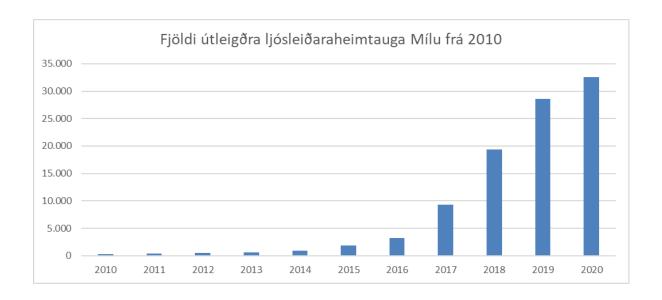
Discussion on these scenarios can be found in general discussion in the above specified BEREC common position on geographic analysis from 2014. In the actual PTA geographic analysis, a direct position is not taken on which scenario applies better to this country, or even a mixture of both of them, as a decision on this does not have a direct impact on the conclusion of the analysis.

The scenarios are on their own not deciding factors in the NRA choice of appropriate areas for geographic analysis and for assessment of competitive conditions within them. This is only a general description of how the market structure could appear in the various states.

Míla states that service providers had generally chosen to use the networks of Míla competitors. It is certainly true that parties such as Vodafone, Hringdu and Nova had increasingly used the underlying GR network than that of Míla, but all of these companies also purchase access to Míla systems to a significant degree, particularly Vodafone and Hringdu. It is not unlikely that these transactions will increase during the lifetime of the analysis, as the Míla fibre-optic rollout progresses. Míla fibre-optic rollout has been vigorous in recent years, and according to information from the company, such investments will continue in this vein during the lifetime of the analysis. GR has no guarantee that the companies in question will not transfer their custom increasingly to Míla in the coming years. In addition to this, Siminn, by far the country's largest retailer, has only done business with Míla in the GR operational territory up to this point in time. With the agreement between Siminn and GR from July 2020, Siminn will however to some degree enter the GR system as from the second half of 2021.

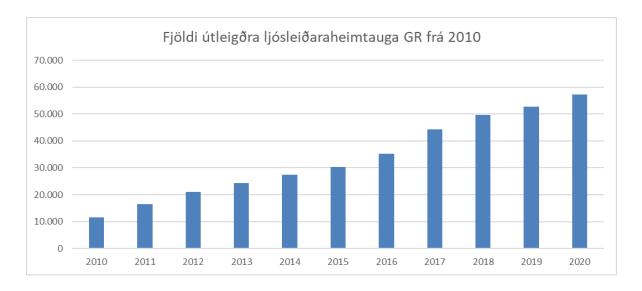
In the following illustration one can see growth in leased fibre-optic local loops owned by Míla, and the organised Míla fibre-optic rollout did not get under way until 2016. As can be seen in the illustration, there is very significant growth in Míla leased fibre-optic local loops in recent times.

Number of leased fibre local loops owned by Mila from 2010:



By comparison, the following illustration shows the number of leased fibre-optic local loops from GR for the same period, but the GR fibre-optic rollout has been under way for a much longer period.

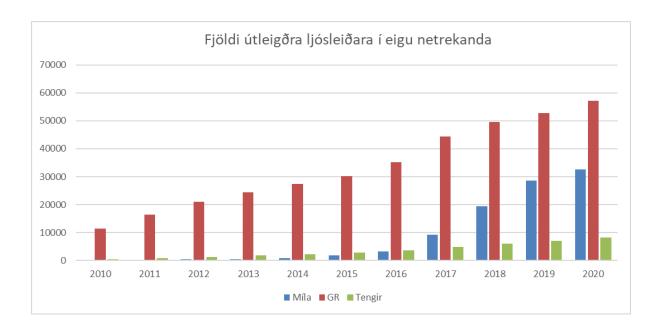
Number of leased fibre local loops owned by GR from 2010:



As can be seen in the above specified illustration, the increase in GR fibre-optic local loops has slowed down significantly since the beginning of 2018.

In the next illustration here below there is a comparison between the development of GR and Míla where Tengir has been added. The PTA had intended to include Snerpa fibre-optic network in the illustration, but the number with that company is so small that it would not have been seen in the illustration.

Number of leased fibre local loops owned by network operators.



Míla referred to paragraph 428 where it was stated that in the report it was stated that most NRAs had taken expected future development into account when elaborating geographic measures. Both expected development of market share and expected development of deployment of next generation networks, including fibre-optic networks were taken into account.

Míla requested answers from the PTA about whether an analysis had been made of future development in this analysis and where it was. Míla could not see that it had been made.

The position of the PTA

In the preliminary draft that was submitted for consultation on 30 April 2020 there are many attempts to estimate expected future development with respect to aspects such as potential development of market share and distribution of electronic communications networks. Such discussion can however not be found in specific sections on possible future development, but rather can be found here and there in the draft.

Subsequent to the above specified consultation, the PTA gathered detailed information from electronic communications companies in order to try to gain a better picture of likely or potential future development with respect to these issues and more, during the lifetime of the analysis. The PTA has now revised the text at many places in the draft decision (Appendix A) with respect to a projection of future development during the lifetime of the analysis, and such projections are also to be found in various places in this document.

Míla refers to paragraph 431 where it is stated that in the case of a large number of small areas, it was likely that there would be various parallels or contiguity with respect to competitive conditions between these areas, or at least part of them. In such instances it could be difficult to draw a clear line between areas where more or less competition existed. One method was to assess competitive conditions in each of such areas separately and

subsequently group the areas. This would however result in huge pressure of work on the NRAs in addition to the fact that it could be a somewhat random process. A more useful and more appropriate method would be to define clear criteria on how the areas are to be grouped. It would then be proper to have in mind the purpose of market analyses which were not in themselves a goal, but rather a device to analyse competitive conditions for the purpose of deciding whether and then on what party, obligations should be imposed to resolve competition problems for the benefit of consumers.

Míla states that the PTA has mentioned in a number of places in this market analysis that it would not be possible and would be very burdensome for the Administration, if many, small areas had to be analysed. Míla casts doubt on this assertion. The situation today was that Míla provided such data for the PTA several times a year and it was broken down by municipality, postcode and address. Míla considered that it should not be very much work for the PTA to analyse small geographic areas such as post numbers, as most of the work should lie with the electronic communications companies with the provision of data. Míla considered that it was easy to analyse data in Iceland, e.g., by postcode if there was a will to do so. Míla considered that, as the state had supported development of fibre-optic systems in the countryside, which were generally separate postcode areas, then this approach was much more reasonable than the one chosen by the PTA.

The position of the PTA

The PTA had initially gathered data both by postcode and by municipality and as of mid-2018, in connection with this analysis. After having analysed this data, the PTA considered that it would be more reasonable to apply municipality boundaries than postcodes. Further discussion can be found on this issue later in the document and reference is made to that. The PTA wishes however to correct that the Telecommunications Fund had not provided grants by postcode, as the fact is that the grants were made to municipalities which means that municipality boundaries are applied in this connection.

Míla refers to paragraph 433 where the question is raised about whether the nature of competitors of the potential SMP operator should be of any significance when categorising areas. If, for example, a potential SMP operator operated first and foremost on xDSL systems, competed with a fibre-optic network operator in area A and with another in area B, the question was whether it is possible to group the areas in question together. In the opinion of BEREC it was the homogeneity of competitive circumstances that should be the deciding factor, and not that these were two separate competitors in different areas. This meant that if analysis of competitive circumstances indicated that they were sufficiently comparable, then areas A and B should be grouped together. If the competitors in question behaved, on the other hand, differently, this should come to light in the analysis and should result in the areas in question forming each their own geographic market, as competitive conditions were not sufficiently homogeneous.

Míla considered it clear that there was extremely distorted competition between xDSL system and fibre-optic connections. Míla pointed out that the price difference that now existed between fibre-optic and xDSL appeared not to suffice for the electronic communications companies to consider it advantageous for them to use xDSL. With the planned PTA decision,

it was clear that the price difference would disappear and that the electronic communications companies would then move connections from what might be an even faster speed in the Míla system over to GR. This would lead to an even greater increase in GR market power than was now the case and Míla considered it clear that GR would become dominant (if GR was not that already) in almost all of its operational territory during the lifetime of the analysis.

The position of the PTA

The PTA has come to the conclusion that substitutability still exists between connections over copper network and fibre-optic network in the relevant wholesale markets. Reference is made to discussion in Sections 3 and 4 in this document, to the same sections in the revised preliminary analysis (Appendix A) and to Appendix C, where there is discussion on the conclusions of the additional consultation.

As has been stated before, the PTA has decided, subsequent to additional consultation, to retract the imposition of an obligation for cost analysed prices for Míla's fibre-optic network on the relevant wholesale markets and instead to impose an obligation on the Siminn Group to withstand an ERT test, which is a lighter measure than an obligation on cost analysed price. An obligation for a cost-oriented tariff will however still rest on Míla for copper local loops.

The PTA notes that Míla has, in recent years, vigorously rolled out a fibre-optic network, and according to information from the company, this development will continue vigorously during the lifetime of the analysis. The PTA has already conducted an analysis, where GR is considered to have SMP. As the PTA has now come to the conclusion that there is still substitutability between copper and fibre-optic, and that there is no reason to define segmented geographic markets, it is clear that Míla is the company that has significant market power on the relevant wholesale markets.

Míla refers to paragraph 435 where it is stated that when forward-looking market analysis had been conducted, it was normal on the basis of legal security and predictability considerations, to make no alterations to the analysis until the next review, even though the development had proven different from the prediction. In the case of significant discrepancy, it was likely that a new market analysis would need to be conducted earlier than planned.

Míla stated that it was established that the Icelandic state had made a binding agreement with most other municipalities in the country on deployment of fibre-optic in the countryside. It was not correct not to take this into account. The same applied to published plans of parties to the market. Míla wondered whether the PTA was providing arguments for only looking to the past and not to the future. The general ESA recommendation on market analysis stated that when conducting an analysis, one should look to the future from the current market status. Míla considered that during the lifetime of this analysis there would be significant changes on the market and for this reason a provision for revision should be included in the analysis for it to be possible to take this into consideration.

The position of the PTA

The PTA discusses the project initiative, Iceland Digital Connected in its analysis and lists the municipalities that have received grants for fibre-optic rollout in the various rural communities in recent years and the amounts of the grants. When the project completes in 2022-2023, more than 6,000 addresses will have been connected with fibre-optic at a wide range of locations in the country's rural areas. Míla's has purchased many of these rural networks recently, has ensured long term control over them or deployed the networks with state aid. Míla also provides bitstream access over most of the rural networks in question, to a much greater extent than the company's competitors on Market 3b.

The PTA also describes distribution plans of parties to the market, such as Míla, GR, Tengir, Snerpa and Austurljós. In the autumn of 2020, the PTA requested detailed information on distribution plans of electronic communications companies. Of these parties, it proved most difficult to acquire meaningful distribution plans from Míla but given the amounts of money that Míla intends to invest in fibre-optic rollout in the coming years, it is clear that none of the above-mentioned companies will even get close to the Míla distribution plans.

It is therefore not correct when Mila states that the PTA has not been forward-looking in its analysis, that it has concentrated on the situation today and only looked at the past.

The PTA expects that substantial changes could take place in the next months and years on the relevant markets, among other things with respect to possible substitutability between copper and fibre-optic, distribution of electronic communications networks of parties to the market, and distribution projections are subject to various variables and a level of uncertainty, the possibility of service providers transferring from one network to another, planned decommissioning of Míla copper network and the distribution of 5G networks and possible uptake of that service and the impact of these factors on the relevant wholesale markets. It could transpire that the PTA needed to commence a new analysis earlier than expected, and even within the 3 years, that should, other things remaining unchanged, be a normal lifetime of this analysis.

Míla refers to paragraph 438 where it is stated that the advice in the ESA Guidelines on market analysis and assessment of SMP from 2004, with respect to geographic definition, was such that the appropriate geographic area for a market depended generally on the distribution of the electronic communications network of the former monopolist and/or the jurisdiction of the Electronic Communications Act, which is the whole country, could in many instances have become obsolete for the purpose of analysing varying competitive circumstances by area. Such criteria could lead to excessively large-scale geographic units. It could also be more appropriate in such instances to use administrative units, particularly if the NRA could demonstrate that competitive conditions within such an area or set of such areas were sufficiently homogeneous and sufficiently different from competitive conditions in other areas or set of areas. As stated in the discussion of cases of PTA sister institutions in Section 5 and in Appendix A-1, it had become more and more common in recent months and years to apply administrative units, not least municipalities.

Míla states that circumstances in Iceland (through state support from Iceland Digital Connected) had resulted in a certain homogeneity that followed postcodes rather than municipality boundaries.

The position of the PTA

Later in this document, the PTA will discuss the comments made by Míla and Siminn that relate to postcodes and reference is made to that.

Vodafone referred to paragraph 450 and said that it was useful to receive information on how the PTA had arrived at these specific proportions in its criteria for areas with greater competition, i.e., more than 75% distribution of a network other than that of Míla, Siminn market share in retail being under 40% and Míla market share less than 50% in lease of local loops at wholesale level. Equally, whether other factors had not had any impact, such as other electronic communications markets, or other service that companies provided, such as e.g. IPTV service. Vodafone considered there to be doubt as to whether the PTA criteria were founded on an appropriate legal basis.

The position of the PTA

For the decision on 75% distribution of fibre-optic network of a party other than Míla, the PTA used the methodology recognised in the ESA guidelines on market analysis, on the ESA recommendation on the relevant markets, on the BEREC common position on geographic analysis and on the practices of the PTA sister institutions in the EEA, having taken into account competitive conditions in this country. The 75% distribution criterion is rather high given the practice abroad, but the PTA considered this necessary and normal in the light of the fact that in general one cannot find areas in this country where more than two parallel electronic communication networks are in place. Widely abroad, the practice is to require at least three for it to be able to justify geographically segmented markets.

The PTA on the other hand, came to the conclusion that there was no reason to segment geographic markets in this country, but rather to prescribe differing obligations by area. The obligations that the PTA lifted from Mila in areas with greater competition are 3 specific obligations that relate to access to Market 3a and one such obligation on Market 3b. In the light of the above, and as Siminn has made an agreement with GR on Siminn entry into the GR fibre optic network, the PTA considered furthermore, subject to additional consultation, that the criterion that Siminn market share needed to be under 40% was relaxed and proposed that this proportion be increased to 50%. The PTA then proposed that the condition for a specific Mila market share (50%) be removed on Market 3a and it was not prescribed as a condition on Market 3b in the preliminary draft, as there was generally a correspondence between lower Siminn market share on the retail market and lower Mila share at wholesale level.

Then the PTA decided to relax price obligations on Míla fibre-optic and to prescribe that the Siminn Group needed to withstand an ERT test instead of cost analysed prices on the fibre optics in question. This was first and foremost done in order not to raise further obstacles to Míla fibre-optic network rollout in the countryside, as development of fibre-optic networks is one factor that the PTA must have in mind when implementing obligations. If conditions on the relevant wholesale markets were to worsen significantly subsequent to the analysis in question, it would be an option that the PTA would soon conduct a new analysis, which would take into account competition problems that might exist and potentially changed competitive

conditions. It would then be an option to apply stricter criteria and possibly impose an obligation on Míla for cost analysed prices on the company's fibre-optic.

The PTA did not consider it appropriate to specifically take into account the position on the IPTV market when elaborating the above specified criteria, among other things because problems related to that market could be on the decline because of a new agreement between Siminn and GR on Siminn bitstream access to the GR fibre-optic network. The incentive for consumers to switch underlying electronic communications network should diminish with such an agreement and consumers on GR fibre-optic network should therefore be able to purchase, e.g., Internet service from Vodafone or other service providers that are independent of the Siminn Group, and purchase Siminn IPTV service as a separate product. Though Siminn had offered access to Sjónvarp Símans Premium and to the English football with what is called "independent network solution", it is clear that there has been little uptake of that service.

Míla states that the PTA applies municipality boundaries when assessing whether it is appropriate to segment the country into geographical markets. The PTA had examined whether one could apply the segmentation on the basis of postcodes, but had considered that this was not suitable for a number of reasons, among other things that postcodes had varying coverage, some covered more than one municipality, postcodes have been changed and it was possible that this would happen again, it was complex and substantial work for the Administration to manage segmentation of markets if postcodes were to change, some electronic communications companies had not been able to supply data by postcode, etc.

Míla considered this PTA approach to be faulty and asserted that postcodes were a better basis when assessing homogeneity within each area and in this country. Then there was, furthermore, the fact that the PTA had only requested sales figures from Míla by type of service, municipality and purchaser (electronic communications company). A request had on the other hand not been made for such detailed data by postcode, only in the case of sales figures for xDSL service.

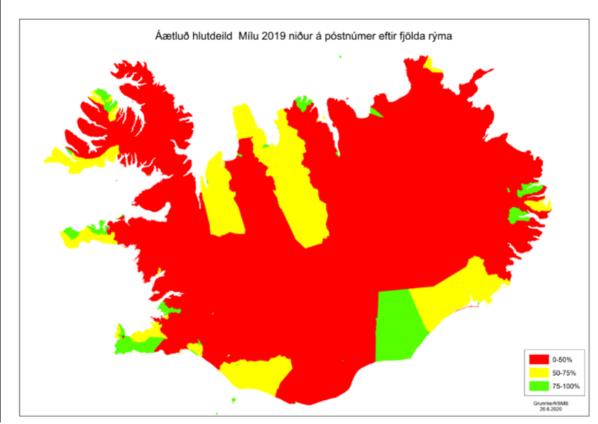
In the opinion of Míla, conditions within each postcode were much more homogeneous than in entire municipalities. The main rule was that there was a separate postcode for each urban kernel while the rural area had another postcode. Circumstances in rural areas in the countryside were quite different from circumstances in urban kernels in the countryside. If one examines circumstances in most municipalities outside the service territories of GR and Tengir, then VDSL from Míla was the best option in urban kernels, with up to 100% distribution, while fibre-optic that had been deployed or would be deployed during the lifetime of the analysis by the municipality in question in the project Iceland Digital Connected, was in the rural areas. Míla market share of the local loop market was in a rapid decline in postcodes in rural areas and it was established that Míla would disappear from the local loop market in many postcodes during the lifetime of the analysis.

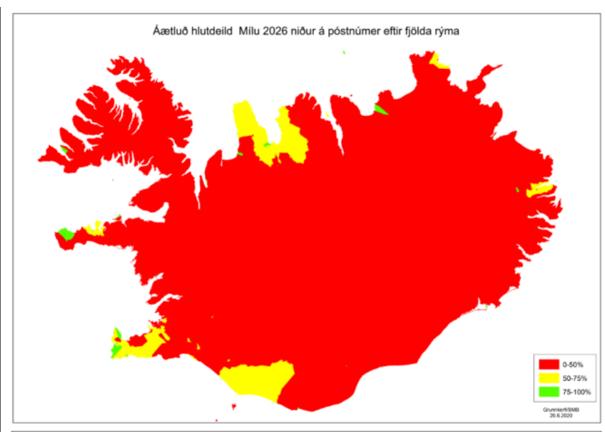
The proportion between the number of homes in urban kernels and in rural areas was very varied between municipalities outside the service territories of GR and Tengir, but on average they were 1/3 in rural area and 2/3 in urban kernel. The division of area between rural and urban was the opposite, is by far the largest part of the area was rural. This high proportion of homes in urban areas meant that the Míla position in the municipality was assessed as

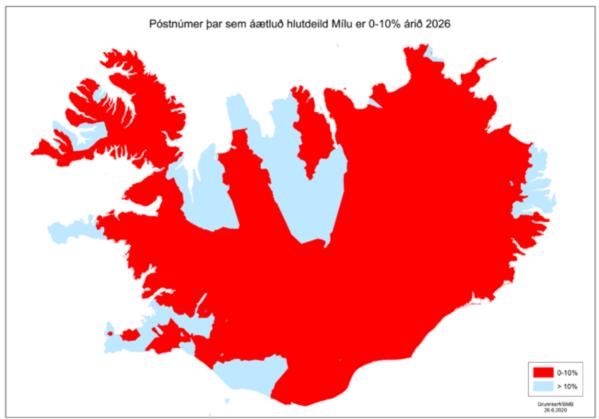
sufficiently strong to maintain obligations on the company in the whole municipality, despite the fact that the Míla position in the rural part was very weak and it was established that Míla would decommission copper local loops during the lifetime of the analysis.

If urban and rural areas in these municipalities (outside the service territories of GR and Tengir) were examined separately, then it would come to light that the proportional decrease in local loops in rural and urban areas were totally different, as connections in urban areas had decreased by about 2.9% during the years 2014-2019, while the corresponding number was 10.8% in rural areas. In the same way, Mila expected that continued rollout of fibre-optic and the decommissioning of the Siminn PSTN system would have a significant impact on Mila for the future. Mila projection allowed for a decrease in urban area up to the year 2026 of 19%, while it allowed for a 57% decrease in rural areas of the same municipalities. It was therefore clear that conditions, both current and future (2026) were totally different between urban and rural post numbers of the same municipalities.

Míla has made a projection on the number of local loops in use with the company, by postcode, until 2026. The share has been calculated, i.e. the number of leased local loops with the total number of dwellings and commercial spaces. Here below one can see 3 illustrations that showed by postcode 1) the estimated Míla share 2019, 2) the estimated Míla share 2026 and 3) the estimated Míla share 2026 where it has dropped below 10%.







One can see from the above illustrations that Míla's strength at national level has been seriously overestimated by the PTA.

In the opinion of Míla, it would have been more appropriate to apply postcodes when segregating geographically, as conditions in rural areas were totally different from those in urban areas, particularly on the local loop market, where Míla had lost and would continue to lose, significant market share. Segmenting by postcode would give a more accurate picture of market conditions, as it would be possible to aggregate post numbers where similar conditions pertained.

The PTA arguments for not applying postcodes because of the level of complexity and considerable work for the Administration's employees was not acceptable and the PTA, pursuant to the law, was perfectly capable of gathering information from electronic communications companies, such as data ordered by postcode. Míla also rejected that electronic communications companies did not provide information about connections, ordered by postcode. All connections had a specific location which naturally linked to a postcode. It must be clear to electronic communications companies, where the connections they were offering were located. Municipality boundaries were Furthermore, no less variable than postcodes. There were many examples of changes to municipality boundaries during recent years and one could expect significant changes in the coming years because of new rules on minimum number of inhabitants in municipalities.

The PTA then considered among other things on the basis of the above specified criteria that municipality boundaries should be applied, that there was no need to segment the country into varying geographic markets where it was among other things, argued that these areas were not sufficiently heterogeneous.

The position of the PTA

In this instance, Míla is calculating the number of leased, Míla local loops as a proportion of dwellings and commercial spaces. This is not what the PTA has been applying in its analysis and here Míla is mixing together two methodologies which gives a very misleading conclusion. There is a certain proportion of dwellings and commercial spaces that does not have any connection (does not have any local loop or that a local loop is in place, but no active connection), which means that no company can achieve 100% share with this method, even though the company in question had on its own, all the active connections in the area. This presentation is therefore very misleading and without merit.

The PTA on the other hand, examines distribution, where a calculation is made of the proportion of the spaces (both the number of dwellings and commercial spaces) that has the opportunity of a connection to a local loop from the electronic communications company in question and on the other hand, examines market share on the retail market, which is the proportion of leased local loops owned by a company of the total number of local loops that are leased (not all spaces).

Míla then presents a projection for the year 2019, which has passed and should be available, and a projection is presented for 2026 without any attempt being made to provide information on the criteria for these Míla projections.

In the light of the above, the scenarios presented by Míla in its comments are totally without merit.

In the first PTA collection of data by area, with reference to statistics for end of year 2017, information was only requested by postcode and from mid-2018, the PTA requested information from electronic communication companies by postcode and by municipality. In this case the request was made for both distribution numbers and numbers in wholesale and retail. Subsequent to this request for information, the PTA made the decision that it was most appropriate to use the statistics by municipality rather than by postcodes. After that the PTA has requested such numbers by municipality as of end of year 2018/2019, mid-year 2019, turn of year 2019/2020 and the turn of the year 2020/2021. The preliminary draft, which was open for consultation on 30 April 2020, was on the basis of statistics from mid-2019, as end of year figures for 2019 had not been received. In the revised analysis (Appendix A), the statistics were revised on the basis of end of year figures from 2020, with respect to market share figures by municipality and distribution of networks. Retail figures have furthermore been updated on the basis of figures from the end of 2020. The PTA will then, on an annual basis, request end of year figures by municipality at the beginning of each year, next at the beginning of 2022 for end of year figures for 2021. The PTA also has distribution figures by municipality in connection with regular data collection for the operation of the PTA infrastructure database. These are distribution of networks at the end of 2020. The PTA does not however have new figures than from mid-year 2018 on market share by postcodes, but only by municipalities, as the PTA considers it more appropriate to use municipality boundaries than postcodes after careful scrutiny.

The PTA does not agree with Míla that postcodes are more suitable criteria than municipality boundaries when assessing homogeneity or differing competitive conditions by area in this country. As is stated in Section 6.4.2 in the preliminary draft (now Appendix A) those local networks that have enjoyed state support through the project Iceland Digital Connected, have been deployed within the relevant municipalities, though they have not yet all achieve total coverage of the relevant municipality. A number of municipalities have also funded networks for their inhabitants, with or without the participation of inhabitants, without state funding.

It was then stated that the PTA had examined whether postcodes could be suitable units for geographic analysis. That examination had revealed that some postcodes covered a very wide area while other postcodes were very small. There is also the fact that some postcodes in the countryside covered more than one municipality while in other municipalities there were many postcodes. Postcodes had also been subject to changes and it was not impossible that such changes would take place in the future and for this reason the PTA judged them not to be sufficient to be stable boundaries. Though the merging of municipalities could possibly take place during the lifetime of the analysis, it was the opinion of the PTA that such changes would not result in municipality boundaries being unstable, as with such merging, an area of land did not move from one defined area to another area, but rather merged while the boundaries of the merged municipality remained unchanged, with respect to other municipalities. It was much more common in Europe to use municipality boundaries than postcodes.

It is appropriate to note that pursuant to article 15 of the Act on Postal Services no. 98/2019, it is the PTA that decides geographic boundaries of postcodes and issues a postcode register. Until the Act came into force, this role was in the hands of Íslandspóstur ohf. According to the definition of postcodes, pursuant to the Act, the sole purpose of postcodes is for geographic demarcation, in order to locate the recipient and thus facilitate distribution of post.

One can therefore say that postcodes have in fact the only purpose pursuant to the above referenced Act, to provide employees and sorting machines with information about where to send the relevant post, in order for it to be distributed to the proper recipient. The purpose of postcodes is therefore only to support efficient distribution of post. On the other hand, companies and the authorities have throughout the years used postcodes for another purpose, e.g., for various kinds of categorisation with respect to rights and obligations of citizens. Any other kind of use of postcodes is the responsibility of the party that uses the postcodes for some other form of differentiation in his service. It is furthermore not required that postcodes and their geographic coverage follow the boundaries of individual regions, municipalities or counties. Many smaller municipalities do not have their own postcode, but rather share a post code with another or other municipalities. Only postal operators, municipalities and public institutions can demand that postcodes and/or geographic coverage be changed. Electronic communications companies are for example not in that group.

The Local Authorities Act no. 138/2011 deals with municipalities. In article 1 it states that the country is divided into municipalities which are responsible for governing their own affairs. The administration of municipalities is managed by the local authorities who are democratically elected. Each person shall be deemed a resident of the municipality in which they are legally domiciled. Municipalities are legal entities. In article 3 it is stated that the Act forms a general foundation for the operation and public administration of the municipalities. It is stated in article 4 that municipalities have certain boundaries that are dependent on the outer limits of the sites of real property, including national land, that lie within them. Municipality boundaries may not be altered except by law. Despite the above, the Minister may alter the boundaries of municipalities in conjunction with the merging of municipalities, while in Chapter XII of the Act there are provisions on merging of municipalities. When two or more municipalities merge, a new municipality shall come into being and will have the same geographic demarcation as the merged municipalities had.

Subsequent to the merging of 4 municipalities in East Iceland in the spring of 2020 there are now 69 municipalities in the country. Postcodes are however something over 170 when post box numbers have been deducted. In the BEREC common position on geographic analysis from 2014, one criterion that must be taken into account when choosing areas for geographic analysis is that the boundaries of the areas should be clear and stable, such that parties to the market can easily understand them. The PTA considers that both parties to the market, consumers and other stakeholders find it easier to understand boundaries of municipalities than the large number of postcodes, which in the opinion of the PTA are very untransparent and numerous for a country with as small a population as Iceland. For this reason, there is greater transparency in applying municipality boundaries.

Another criterion discussed in the BEREC document in question is that areas should be sufficiently small to ensure that competitive conditions would be unlikely to change significantly within these areas and they should be sufficiently large to prevent an excessive burden on electronic communications companies from replying to queries and reacting to requests for data from electronic communications regulatory bodies and on the electronic communications authorities from analysing data received. It was often possible to use as an indicator that the area was large enough to be subject to investment decisions of a network operator. The PTA considers that this condition is better fulfilled by applying municipality borders than postcodes. In the opinion of the PTA, it is clear that investment decisions of

infrastructure companies in electronic communications are made rather on the basis of municipal boundaries than postcodes, as they often come to an agreement with the relevant municipalities on fibre-optic rollout in the relevant municipality, with or without state aid, which is provided to municipalities from the state Telecommunications Fund.

In the opinion of Míla, conditions within each postcode were much more homogeneous than in entire municipalities. The main rule was that there was a separate postcode for each urban kernel while the rural area had another postcode. Circumstances in rural areas in the countryside were quite different from circumstances in urban kernels in the countryside. If circumstances in most municipalities outside the service territories of GR and Tengir were examined, then VDSL from Míla would be the best option in urban kernels, with up to 100% distribution, while fibre-optic that had been deployed or would be deployed during the lifetime of the analysis by the municipality in question in the connection with the project Iceland Digital Connected, would be best in rural areas. Míla market share of the local loop market was in a rapid decline in postcodes in rural areas and it was established that Míla would disappear from the local loop market in many postcodes during the lifetime of the analysis. The proportion between homes in urban kernels and in rural areas was very varied between municipalities outside the service territories of GR and Tengir, but on average they were 1/3 in rural area and 2/3 in urban kernel. The division of area in urban and rural, was the opposite.

The PTA cannot see that there is any main rule in the country's municipalities that urban kernels generally have 2/3 of the inhabitants and rural areas within the municipality in question have 1/3 of the inhabitants.

In a news item on the Statistics Iceland website, 22 July 2020, it was stated that 5.9% of the country's population lived in rural areas, while 94.1% lived in urban areas, as of 1 January 2020. Rural areas mean countryside or an urban kernel with fewer than 200 inhabitants. The number of urban kernels in rural areas is 32, where about 21,633 inhabitants live. Urban areas are defined as urban kernels that can cross municipality boundaries where there is a minimum of 200 inhabitants. An urban kernel is a contiguous group of houses within one municipality were fewer than 200 metres between buildings, and the kernel has a specific name. The minimum number of inhabitants in each urban kernel is 50. Urban areas with 200 inhabitants or more were 63 at the beginning of 2020. They have 342,501 inhabitants. The population of the whole country was therefore 364,134 on 1 January 2020.

As previously stated, the country's municipalities total 69. In the following 19 municipalities where there are almost no rural areas or at least negligible areas: Reykjavík, Hafnarfjörður, Garðabær, Kópavogur, Seltjarnarnes, Mosfellsbær, Akraneskaupstaður, Stykkishólmsbær, Tálknafjarðarhreppur, Bolungarvíkurkaupstaður, Blönduósbær, Skagaströnd, Akureyrarbær, Westman Islands, Hveragerðisbær, Grindavíkurkaupstaður, Reykjanesbær, Suðurnesjabær and Vogar. Míla has now acquired the Blönduós municipality network.

In the following 19 municipalities there are rural areas with no urban areas, according to the above definition: Kjósarhreppur, Hvalfjarðarsveit, Skorradalshreppur, Eyja-Miklaholtshreppur, Helgafellssveit, Árneshreppur, Húnavatnshreppur, Skagabyggð, Akrahreppur, Hörgársveit, Þingeyjarsveit, Skútustaðahreppur, Tjörneshreppur, Fljótsdalshreppur, Svalbarðshreppur, Asahreppur, Flóahreppur, Grímsnes-Grafningshreppur and Skeiða- and Gnúpverjahreppur. Míla has now acquired the networks

of Akrahreppur and Grímsnes- and Grafningshreppur and has leased the networks of Skagabyggð and Svalbarðshreppur with a long-term lease.

This is a total of 38 municipalities to which the above applies and are thus not according to the alleged rule referred to by Míla. There are 31 municipalities remaining.

The alleged "main rule" named by Míla, where urban areas/urban kernels have about 2/3 of the population and rural areas about 1/3 could apply to the following 20 municipalities: Borgarbyggð, Snæfellsbær, Grundarfjarðarbær, Dalabyggð, Reykhólahreppur, Vesturbyggð, Súðavíkurhreppur, Strandabyggð, Sveitarfélagið Skagafjörður, Dalvíkurbyggð, Svalbarðsstrandarhreppur, Grýtubakkahreppur, Norðurþing, Langanesbyggð, Vopnafjarðarhreppur, Múlaþing, Sveitarfélagið Hornafjörður, Rangárþing Eystra, Rangárþing Ytra and Sveitarfélagið Ölfus. Míla has now acquired the networks of Snæfellsbær, Súðavíkurhreppur, Strandabyggð (in part), Sveitarfélagið Skagafjörður and Rangárþing Eystra and has leased the Langanesbyggð network on a long-term lease. There are therefore only 14 fibre-optic networks in municipalities where Míla considers that the above specified "main rule" applies, that are not owned by or under long term control of Míla. This is about 20% of the country's municipalities. One could note that 4 of the above specified municipalities are included in the PTA plans for lighter obligations, i.e., Sveitarfélagið Ölfus, Svalbarðsstrandarhreppur, Rangárþing Ytra and Grýtubakkahreppur. If they are deducted, then there are actually only 10 municipalities remaining.

So, 11 municipalities remain that constitute both urban areas/urban kernels and rural areas that do not conform to the alleged main rule asserted by Míla. In the following 4 municipalities one can find one or more urban area/urban kernel and much fewer inhabitants in rural areas than 1/3 of the inhabitants: Ísafjarðarbær, Fjallabyggð, Fjarðabyggð and Árborg. In the remaining 7 municipalities the situation is such that there the proportion of inhabitants in rural areas is considerably higher than the proportion of inhabitants in urban areas/urban kernels: Kaldrananeshreppur, Húnaþing vestra, Eyjafjarðarsveit, Skaftárhreppur, Mýrdalshreppur, Hrunamannahreppur and Bláskógabyggð. Míla has now purchased the Húnaþing vestra network and a part of Skaftárhreppur's network.

In 38 municipalities there is variously no urban area/urban kernel or only one urban area/urban kernel with no or very little rural area. This represents 55% of municipalities in Iceland. With the above in mind, there are 20 municipalities of 69 that one could say comfortably fit the description that Míla asserts is the main rule with respect to population distribution within municipalities in Iceland. This represents about 29% of municipalities in Iceland. Míla has purchased or made long term lease agreement for several of these networks. There are, as previously stated, only 14 municipalities where Míla does not own or have long time control over fibre-optic local loops, that fit the alleged main rule, which is about 20% of the country's municipalities. The PTA considers it absolutely clear that there is no main rule, as Míla asserts, but to the contrary, that situation only applies to a small minority of municipalities in Iceland. It can therefore not be an adequate argument for the conclusion that municipality boundaries are not appropriate as a reference for geographic analysis.

Míla stated that this high proportion of homes in urban areas meant that the Míla position in the relevant municipality was assessed as sufficiently strong to maintain obligations on the company in the whole municipality, despite the fact that the company's position in the sparsely populated part was very weak and it was established that Míla would decommission

copper local loops during the lifetime of the analysis. Míla connections had decreased during the years 2014-2019 by about 10.8% in sparsely populated areas, but only by about 2.9% in urban areas. Up until 2026, Míla projected that connections would decrease by about 57% in sparsely populated areas of some municipalities, but only by about 19% in their urban areas. Segmenting by postcode would give a more accurate picture of market conditions, as it would be possible to aggregate post numbers where similar conditions pertained.

As specified above, this situation only applies to about 14 municipalities of 69 or 20% of the country's municipalities, which means that the above specified situation is not typical for competitive conditions within municipalities in this country. Of those, there are 4 that are covered by the PTA plan for lighter obligations, which means that there are in fact only 10 remaining that could match the Mila hypothesis, i.e., 14.5%.

As stated above, the PTA initially requested data from the electronic communications companies both by postcode and by municipality. For the reasons described above, the PTA considered it more appropriate to use municipalities rather than postcodes. The PTA reiterates that Mila has recently purchased many of the state-supported country networks from a large number of municipalities, leased them on long term lease or deployed them themselves with a grant from the municipality in question and/or the electronic communications funds. The PTA considers this development can continue during the lifetime of the analysis. The PTA then states that it is assumed that the lifetime of this analysis could be about 3 years, and even shorter should significant changes occur on the relevant markets before that time. It was not correct to base projections on the coming 6 years or until 2026, as Mila appears to have done. According to the Mila plan for decommissioning of the company's copper local loops, most of this will take place during the next 5-10 years, at least where Mila has not already deployed fibre-optic local loops or acquired such local loops. It is clear from the Mila investment plans that the company's fibre-optic rollout will be extremely well distributed at the end of the lifetime of the analysis.

One can also note that there are two criteria with respect to choice of areas for analysis, i.e. on the one hand the above specified 75% distribution of fibre-optic networks other than that of Míla and on the other hand the criterion that Siminn has less than 50% market share in retail in the municipality in question. The Siminn position in retail in the countryside is extremely strong, where the average Siminn market share outside the Capital City Area is about [...]%. Even if the PTA would conduct geographic analysis by postcode, the situation would doubtless not change significantly, given the methodology of applying municipalities, as the large majority of postcodes in rural areas in the countryside would not meet the latter criteria which prescribes that the Siminn market share in retail is less than 50%.

One can also note that subsequent to the additional consultation that was opened at the end of October 2020, the PTA relaxed criteria for selection of areas, which meant that municipalities that belong to areas with more competition and thus with lighter obligations, increased from 6 on Market 3a and 7 on Market 3b to 17 on each market. The situation now is that the whole of the Capital City Area belongs to this category and at national level this is an area where about 70% of the country's population lives. Then the change was prescribed that the list of municipalities that belong to the areas with more competition, and thus lighter obligations, should be updated annually, for the next time early 2022.

Míla finally asserted that the PTA arguments for not applying postcodes because of the level of complexity and large amount of work for employees of the Administration were not acceptable and that the Administration had, by law the capacity to acquire information from the electronic communications companies. Míla also rejected that electronic communications companies did not provide information about connections, ordered by postcode. All connections had specific locations that naturally were linked to postcodes. Municipality boundaries were, furthermore, no less variable than postcodes. There were many examples of changes to municipality boundaries during recent years and one could expect significant changes in the coming years because of new rules on minimum number of inhabitants in municipalities.

The reason why the PTA chose municipality boundaries and not postcodes was that the postcode methodology was more complex or required more work for the PTA. There were many reasons and they have been adequately explained here above.

Mila maintains that the company's market share of the local loop market was in rapid decline in postcodes in rural areas and it was established that Míla would disappear from the local loop market in many postcodes during the lifetime of the analysis. As stated here above, only 5.9% of the country's population live in sparsely populated areas, which is about 22,000 inhabitants. The Telecommunications Fund has with its project, Iceland Digital Connected, supported fibre-optic rollout to about 6000 addresses in sparsely populated areas when the project completes in 2021-2022. It has furthermore previously been described that Mila has purchased a large number of such countryside networks in recent years and months or ensured long term control of such networks. This means that there are far fewer than 6000 addresses where Mila does not own or control the countryside fibre-optic network or has deployed them with grants from the relevant municipality and/or electronic communications fund. The PTA considers these purchases can continue during the lifetime of the analysis. The PTA estimates that at the end of the lifetime of the analysis, 2-3% of addresses in the country would be in the situation where Míla had neither copper nor fibre-optic local loop to the property, and this would be in the most sparsely populated areas of the country. Míla will then probably offer bitstream access to almost all of these addresses.

Though obligations may rest on Míla for these few addresses in rural areas, where Míla will not have a local loop, the obligations will in reality not be active, as there is no local loop in situ, owned by Míla, or of which Míla has long term control. These local loops are however such that most of them were deployed with state aid and therefore there is no great risk of a competition problem resulting from them.

Míla referred to paragraph 441 where it is stated that it was the PTA assessment that municipalities were suitable units as references for geographic analysis, given the situation in this country today. Reference is made, among other things to discussion in Section 6.3 on the distribution of electronic communications networks, planned distribution and network topology.

Míla considered the PTA assessment to be wrong. Market conditions in Iceland varied greatly, and the difference fitted directly with postcodes. Market failure and the support of the Icelandic state in fibre-optic rollout fitted directly with segmentation by postcode. Postcodes were the only realistic method to encompass the varying deployment of local loops,

which was extremely varied. Competitive conditions were at many locations homogeneous within post numbers, but not within municipalities. In a great number of municipalities, there was one party to the market involved in development in rural areas and another in urban areas. Postcodes encompassed both development by municipalities with state aid and the development of other parties to the market. Municipality boundaries, on the other hand did not do this and would create a distorted picture of differing market conditions.

The position of the PTA

In reply to the Míla comment here immediately above, the PTA argued in detail why municipality boundaries were considered in the opinion of the PTA to be more correct and suitable references for choice of area for further geographic analysis than postcodes. Reference is made to this.

The PTA does not agree with the Míla assessment that competitive conditions are widely homogeneous within postcodes. Though they can be in some postcodes, the same does not apply to connections in many others.

Míla states that market failure and the support of the Icelandic state in fibre-optic rollout fitted directly with segmentation by postcode. The PTA points out that state support from the Telecommunications Fund for fibre-optic rollout is provided to specific municipalities for fibre-optic rollout in sparsely populated areas within that municipality. In that instance, this is not related to postcodes. Nor is it possible to agree that such grants fit directly to segmentation by postcode. There are many permutations of how postcodes are divided within municipalities or between them. Some postcodes cover e.g., more than one municipality, and there are various discrepancies between municipalities and postcodes. As stated above, the role of postcodes pursuant to Post legislation, is solely to support efficient distribution of post.

The PTA reiterates that the "main rule" asserted by Míla to apply to municipalities in Iceland, i.e. that they are structured such that two thirds of the inhabitants generally live in urban areas/urban kernels within the municipality while one third live in the sparsely populated areas, only applies to about 20% of municipalities in Iceland, when one has deducted the municipalities where Míla has purchased countryside networks, ensured long-time control of such networks or has deployed them with grants from the relevant municipality and/or electronic communications fund. When one has deducted the 4 municipalities that already fulfil the PTA criterion for lighter obligations, this figure is only 14.5%.

Nor is the PTA aware of it being common in this country that there is one party to the market in development in rural areas and another in urban areas within specific municipalities, though such examples do exist. Tengir has for example deployed fibre-optic no less in rural areas than in urban. On the other hand, GR has almost exclusively deployed fibre-optic in urban areas.

With the above in mind, the PTA rejects that municipality boundaries draw a distorted picture of differing market conditions in this country. It is perfectly feasible to design criteria by municipality boundaries that gather together in one group those municipalities where comparable competitive conditions pertain. What matters most is that Siminn is generally in a dominant position on the retail market in the countryside with over 50% market share, which is the reference that applies along with the criterion for at least 75% distribution of a network other than that of Míla. It would therefore, in the opinion of the PTA, not change much with

respect to the conclusion of this analysis to apply postcodes instead of municipality boundaries.

The PTA refers to paragraph 442 where it is stated that Míla distribution has national coverage and that the company operates in all municipalities on the relevant markets. From former times, the company system was divided into telephone exchange areas which were mostly based on urban kernels and service with neighbouring rural areas.

Míla said this was not the case. At those locations where municipalities had not deployed fibre-optic networks, the Míla network would be decommissioned with the decommissioning of PSTN. Míla would therefore not have national network coverage on Market 3a.

The position of the PTA

The PTA reminds that the decommissioning of the Míla copper system has not commenced to any significant degree and it is not expected that this development will commence in earnest until after the lifetime of this analysis, particularly in areas where the company does not have a fibre-optic network to take over, except then in very sparsely populated and widespread areas. At the end of 2020, specific assets and operations from Siminn were transferred to Míla, including the PSTN voice telephony system. Míla has informed the PTA that the plans that Siminn notified with regards to decommissioning of the PSTN system could be delayed, as Míla intends to conduct this decommissioning in step with decommissioning of the copper system. It is not inconceivable that the lifetime of the xDSL service could be extended in parallel to a longer lifetime of PSTN. The PTA also reiterates that Míla has in recent times, purchased, ensured long term control of or deployed with state aid a large number of these countryside networks and it is expected that this development will continue during the lifetime of the analysis. Particularly after the PTA withdrew the intention to prescribe cost analysed prices for Míla fibre-optic.

Míla referred to paragraph 444 where it was stated that the PTA had examined whether postcodes could also be suitable units for geographic analysis. That examination had revealed that some postcodes covered a very wide area while other postcodes were very small. There is also the fact that some postcodes in the countryside covered more than one municipality while in other municipalities there were many postcodes. It is worthy of note that postcodes had changed, and it is not out of the question that such changes would occur again. Though the last change was fairly recent, they were not stable boundaries that one can assume to remain unchanged for the lifetime of the analysis.

Míla said that in the same way, some postcodes covered a wide area, and municipalities did that too. Some municipalities were small, while others were large, just like the division between post numbers. Post numbers handled the difference that existed in building development between rural and urban areas, which the postcodes did not. Post numbers were considerably more stable boundaries than municipalities where it was established that they would change rapidly during the coming years when the minimum number of inhabitants would be set at 1000.

The position of the PTA

It is true what Míla says, that municipalities vary in size in this country. The PTA refers to detailed arguments here above as to why the PTA considers municipal boundaries to be more correct and appropriate references for geographic analysis in this country than postcodes. Though municipalities may merge during the coming years in this country, this does not change the demarcation between the merged municipality and other municipalities. It is usually sparsely populated and neighbouring municipalities that have been merging, where competitive conditions are generally similar.

Míla refers to paragraph 447, where it is stated that the PTA plans to base its selection of areas for geographic analysis on municipal boundaries.

Míla said that by choosing municipal boundaries without reasoned grounds, the PTA choice on an important basic premise was incorrect and conducive to drawing an incorrect picture of the real geographic difference and to creating an area where homogeneity was not in place, instead of using postcodes which captured homogeneity.

The position of the PTA

The PTA refers to detailed arguments here above, as well as in chapter 6.4 in the updated preliminary draft (Appendix A) as to why the PTA considers municipal boundaries to be more correct and appropriate references for geographic analysis in this country than postcodes.

Siminn considered that postcodes or urban kernels were the best measure, as connections were categorised by postcode and not necessarily by municipality numbers. Then postcodes that were adjacent to each other and to which the electronic communications company in question had deployed fibre-optic, should be aggregated and thus categorise together areas that were adjacent and that had comparable competitive conditions. When this was done, one contiguous area would be achieved where GR had gained more than 50% distribution, and one contiguous area where Tengir had achieved 50% distribution.

It was more difficult to analyse other areas, but they could be categorised using the same measure. When kernels or urban areas had a limited population, it was normal to categorise such municipalities along with larger kernels or categorise them as part of a rural area. The key issue was to have areas sufficiently large, so that minor fluctuations did not lead to exaggerated changes in market share.

The position of the PTA

The PTA refers to detailed arguments here above as to why the PTA considers municipal boundaries to be more correct and appropriate references for geographic analysis in this country than postcodes. The PTA does not consider it feasible to apply "urban kernels", among other things because they are not recognised administrative units, pursuant to Icelandic law, as the municipalities are. The PTA furthermore considers it appropriate to limit areas, e.g., municipalities, such that they had to be adjacent. The PTA considers that if municipalities fulfil the two conditions, i.e., that if a network other than Míla network had at least 75% distribution and, where Siminn market share was under 50%, then they belonged

to areas with more competition, without regards to whether they are adjacent or not. This is in accordance with recommendations from ESA, with the BEREC common position from 2014 on geographic analysis and with practice elsewhere in Europe. The PTA also considers it to be insufficient to apply 50% distribution of a network other than the Míla network in this country, as there is generally only one network competing with the Míla network in this country, where Míla is not in a monopolist position.

Siminn mentions that a key issue was to have areas sufficiently large, so that minor fluctuations did not lead to exaggerated changes in market share. The PTA cannot see that this comment harmonises with the Míla comment described here above, with respect to it being most reasonable to apply postcodes. There are very many of them, about 170, and many are very small and sparsely populated. Subsequent to additional consultation, the PTA also decided to revise the list of municipalities deemed to have more competition, on an annual basis. This should "capture" changes in development of market share, which the PTA actually considers to be not likely in the countryside in this country, as Siminn generally has a very strong position.

Míla referred to paragraph 448, where it was stated that in BEREC reports there generally had to be more than one network competitor of the SMP operator for it to be possible to consider that effective competition, or at least significant competition, could exist on the relevant market. In Iceland it was generally the case that there was only one network competing with Míla in each area and it was assumed that this situation would not change during the lifetime of this analysis. Large and rather sparsely populated areas did not however enjoy any such competition.

It was stated by Míla that the PTA did not take into account that most of these large areas would not have any network from Míla, but rather a fibre-optic system from the municipality or otherwise from a Míla competitor.

The position of the PTA

The PTA does not agree that most of these large areas would not have any network from Míla but rather only a fibre-optic system from the municipality or otherwise from a Míla competitor during the lifetime of this analysis. The PTA considers that most effort in decommissioning the Míla copper network would be subsequent to the lifetime of this analysis, and Míla had now published a plan for the next 10 years, in connection with this. Míla had furthermore been purchasing the networks of such parties widely across the country, and in addition to this, several municipalities had made agreements with Míla on deploying a fibre-optic network against a grant from the municipality in question and/or the electronic communications fund. The PTA considers this development could continue during the lifetime of the analysis. Particularly after the PTA withdrew its intention of imposing a cost analysis obligation on Míla fibre-optic and prescribed instead an ERT obligation.

Míla referred to paragraph 449 where it was stated that in order to divide areas into units with little or no competition on the one hand and units with more competition on the other hand, it would be normal in the opinion of the PTA in the light of conditions in this country to

subject such segmentation to rather strict criteria. There are no known examples from Europe that the existence of only two networks, including the network of the former monopolist, had justified geographic measures on Market 3a.

Míla disagreed with this strict definition. The uniqueness of the Icelandic market had to be taken into account, as there was no economic basis for deploying 3 fibre-optic networks. All analysis by the PTA was furthermore lacking on distribution of wireless high-speed networks that could be a substitute for fibre-optic networks.

The position of the PTA

The PTA states that subsequent to additional consultation, the Administration had significantly relaxed the conditions in question. Among others, had increased the reference for Siminn market share from 40% to 50% and had retracted its intention to apply a specific market share for Míla. This means that municipalities that belong to an area with more competition, increase significantly, or from 6 to 17 in the relevant market, and now cover about 70% of the population. The PTA refers to Sections 3 and 4 in the revised preliminary analysis (Appendix A), to the same sections here above and to Appendix C with respect to assessment of substitutability between wireless networks and fixed line networks.

Míla refers to paragraph 450 in the preliminary analysis, where the 3 criteria were listed that the PTA planned to use for its choice of areas with more competition.

Míla considered these to be far too stringent rules, and in fact designed to justify even further regulation on the relevant markets, which had been extremely active and served its customers well. Iceland has among the highest usage in the world of fibre-optic connections and the distribution of high-speed broadband connections was among the highest known on a world basis. With these rules, it was clear that further development by Míla on the local loop market was being stopped, without significant demands for setup charges from customers and/or state support. As GR did not collect start-up charges and had already completed fibre-optic rollout in the south-west corner, Míla could not collect setup charges if a single price tariff was imposed. It was therefore clear that with this, the growth and development that had been taking place in recent years was being suffocated.

Míla also thought that it could not be right to increase demands on Míla at the same time as the company's competitors had developed their fibre-optic networks to 100% of homes and companies in an area that covered 72-75% of households in the country, while Míla had a mixture of fibre-optic systems and VDSL systems in that area. GR had declared that during the next two years, the company would have deployed fibre-optic to about 90% of homes and that the company had about 50% market share in major parts of this area. GR planned to have a local loop network with national coverage in the year 2025. Tengir had also deployed to about 7% of the country's homes in another area, i.e., about 60% to 70% coverage of that area.

The position of the PTA

The PTA refers to the fact that subsequent to the original consultation on the preliminary draft and to the additional consultation, the Administration decided to somewhat relax the criteria

needed for a municipality to be deemed to belong to an area with more competition. The PTA furthermore decided to withdraw its intention of imposing a cost analysis obligation on Míla fibre-optic and prescribed instead an ERT obligation. This gives the Siminn Group greater latitude in pricing at wholesale and retail level and should to a certain extent represent concessions to the views that cost analysed prices on fibre-optic could slow down deployment of fibre-optic networks in the countryside.

The PTA considered in its preliminary analysis, on the basis of the potential and real competitive problems identified on the relevant markets and the fact that Míla had since the last analysis, conducted fast and vigorous deployment of fibre-optic, that it was normal to impose an obligation for cost-oriented tariff on Míla fibre-optic. But, as previously stated, various developments have taken place since the preliminary draft in question went for consultation, among other things an agreement between GR and Siminn. Subsequent to additional consultation, the PTA decided to withdraw its intention to impose such an obligation and prescribed instead a lighter obligation in the form of ERT test. As is stated in Section 6.2 here above, Míla significantly exaggerates the GR deployment plans during the lifetime of the analysis, while the Míla deployment plans during the life of the analysis are ambitious.

Míla referred to paragraph 451 where it was stated that the PTA had analysed specific data and come to the conclusion that the 3 conditions the PTA had applied in its preliminary draft for Market 3a were fulfilled at the same time in the municipalities of Reykjavík and Seltjarnarnes, in the GR operational territory and in Skútustaðahreppur, Svalbarðsstrandarhreppur, Grýtubakkahreppur and Tjörneshreppur in the Tengir operational territory. In the Ölfus municipality, GR distribution reached, for example 75% of households and the Siminn share of retail market Internet service is under 40%, while the Míla market share in wholesale of local loop lease is over 50%.

Míla considered that the PTA needed to explain the grounds for this analysis. Míla could for example not see that any attempt had been made to try to predict market development during the lifetime of this analysis, as it would be normal to do, but rather had used a point in time situation in mid-2019. It was clear that this position would be 1 1/2 to 2 years old when this market analysis became a decision. This was at the same time as there was considerable development taking place by parties other than Míla. Míla considered, for example, that even if the PTA only looked forward by about 1-2 years, it was clear that, as Míla lost 2-4% market share per annum, there would certainly be more areas that would belong to that category during the period. Míla also considered that in an analysis like this one, where burdensome obligations were being imposed on companies, the data used had to be correct and preferably presented in such a manner that parties to the market could in some way scrutinise their veracity. Míla therefore considered that a table should be used, e.g., in an appendix, where the data that was not considered to be confidential, e.g. number of homes and addresses that were applied, were shown and there should be an explanation of how each conclusion was reached, step-by-step.

Míla also considered that the PTA data was significantly lacking. The PTA, for example, came to the conclusion that Siminn had 50-100% market strength in Internet in Fljótsdalshreppur. Míla did not see how this could be, as fibre-optic had been rolled out in

the area and Míla did not have access to those local loops. Míla was also not aware that Siminn provided Internet service in the area.

Míla actually considered that the PTA data with respect to distribution and number of homes and spaces in total was faulty. The number of homes appeared to be in many instances reasonably correct, but other spaces significantly distorted the distribution of others. In many locations, where municipalities considered that they had completed 100% distribution, the PTA concluded that distribution of FTTH was inadequate.

If postcodes were used as a reference, many more areas would be examined, as there is a great number of post numbers where municipalities have completed FTTH rollout and where the Míla copper network would be decommissioned within two years. In reality, it would be proper to exempt copper local loops that only carried PSTN, which would be closed in the coming years, and FTTH fibre-optic connections were widely in use and additionally a copper line for PSTN.

The position of the PTA

The PTA rejects that no attempt had been made to predict market development during the lifetime of the analysis in the preliminary draft. Though there had not been a separate section on this, such discussion can be found at various places in the document, both with respect to the likely development of market share and the development of distribution of fibre-optic networks. Subsequent to consultation on the preliminary draft, the PTA gathered detailed data from electronic communications companies and the PTA has updated discussion on such likely future development in its revised analysis (Appendix A). It proved most difficult to gather adequate data on development plans for the coming years from Míla. The PTA has furthermore updated statistics to the status as it was at the turn of the year 2020/2021. The PTA will next gather data by municipality at the beginning of 2022 for the status at turn of year 2021/2022. The PTA has furthermore gathered various data from electronic communications companies as of mid-2020 and up to 1 October 2020 in some instances. The PTA will from now on update the list on an annual basis of those municipalities that belong to areas with more competition, the next update will be early 2022.

Míla mentioned that the company is losing 2-4% market share per annum on Market 3a. Given the development in the newest statistics that the PTA has to hand, the PTA considers it likely that the higher number, i.e., 4%, was closer to the truth in this 18-month period. Míla market share on the market in question was 63% in mid-2019 and 57% at end of year 2020. This makes 2% in half a year which means with no changes, 4% per annum. This is a much larger decrease than in previous years. It is clear that if this becomes the rate of decline of Míla market share during the lifetime of the analysis, Míla will have less than 50% market share at end of year 2023. However, the PTA does not believe that Míla's share will continue to decrease at this rate throughout the life of the analysis. The distribution plans of Míla competitors are much more modest than Míla in the coming years. It is not ruled out that parties such as Vodafone and Hringdu will increasingly move from the GR network to the Mila network during the lifetime. The PTA therefore considers it more appropriate to use the lower figure in its forecasts over the lifetime, i.e., 2% per annum. On Market 3b, the decline of Míla market share has been significantly slower. It was 57% at end of year 2019 and was

65% at end of year 2013. The PTA considers that there is every likelihood that the Míla market share on that market will also be over 50% at the end of the lifetime of the analysis.

Míla also considered that in an analysis like this one, the data used had to be correct and preferably presented in such a manner that parties to the market could in some way scrutinise their veracity. Míla therefore considered that a table should be used, e.g., in an appendix, where data that was not considered to be confidential, e.g., on number of homes and addresses that were applied were shown and there should be an explanation of how each conclusion was reached, step-by-step. The number of homes appeared to be in many instances reasonably correct, but other spaces distorted the distribution of others significantly in specific municipalities. In many locations, where municipalities considered that they had completed 100% distribution, the PTA concluded that FTTH distribution by a party other than Míla did not reach 75%. The data was significantly deficient. The PTA, for example, came to the conclusion that Siminn had 50-100% market strength in Internet in Fljótsdalshreppur, which was not credible as fibre-optic rollout had been completed in the area and Míla did not have access to those local loops. Míla was not aware that Siminn provided Internet service in the area.

In the data that Míla itself submitted to the PTA, it was stated that there were very few connections in Fljótsdalshreppur, including fibre-optic connection on GPON bitstream provided by Míla where Siminn had 50% share of service on these connections. On the other hand, information is lacking from the parties in question on the distribution of other networks, but this has now been rectified. It is thus clear that there is both distribution of networks other than Míla over 75% in the municipality and that the Siminn share is under 50%. Fljótsdalshreppur is therefore categorised under the areas that fulfil both conditions for lighter obligations, as well as Skeiða- and Gnúpverjahreppur and Rangárþing ytra.

With respect to the comment that states that if postcodes were used as a reference, many more areas would be examined, as there is a great number of postcodes where municipalities have completed FTTH rollout and where the Míla copper network would be decommissioned, reference is made to detailed PTA arguments here above.

Míla noted that though further distribution of access networks in fibre-optic could take place, the company considered that the borders between differing market areas were now relatively clear and stable with respect to the market for fibre-optic and were such that there were grounds for defining specific geographic markets on the basis of differing market conditions. One could basically divide these market areas into three:

1. Active competition - This area covered about 70-90% of homes in the country and covered therefore, the largest part of the service market for fibre-optic. In these areas there were two competitors that offered fibre-optic on the one hand Míla and GR and on the other hand Míla and Tengir. There was significant competition between the companies in question in these areas and significant distribution of fibre-optic within them. End users in these areas have the option of high service quality with high-speed connections (1 Gb/s), and in addition, there was price competition between competitors, to the benefit of end users. One could not conclude otherwise than that there was active competition in the areas in question, which had flourished well without any price obligations from the PTA, and this development would continue.

- 2. One operator of fibre-optic system These areas currently reached a small proportion of the country's homes, and this was a market area where one fibre-optic system was operated, variously by Míla, GR, Tengir or by another local party, such as a municipality. In these areas there was by the nature of things, a local monopolist company on Market 3a for fibre-optic (where the party in question may however offer wholesalers dark fibre for lease) or 3b (if bitstream service was offered by local parties, e.g., as GR did). The local company inevitably had a high market share and might have SMP because of its position in the geographic area in question. There was every likelihood that service through copper would be discontinued in these areas in the near future. Even though, such access was still on offer today, Míla considered nevertheless that such service exerted very little competitive restraint on the fibre-optic service provider, if any.
- **3.** Areas where fibre-optic systems will not be offered during the period covered by the analysis Those areas where it was established that fibre-optic would not be rolled out during the lifetime of the analysis (2021-2026). In these areas the Míla copper system would in all likelihood be the fastest broadband system available to inhabitants, in any event until high-speed 5G was introduced in such areas.

The position of the PTA

Míla said that though further distribution of access networks could take place, the company considered that the borders between differing market areas were now relatively clear and stable with respect to the market for fibre-optic, such that there were grounds for differentiating specific geographic markets on the basis of differing market conditions. One could basically divide these market areas into three: i.e., 1) areas with active competition, 2) one operator of fibre-optic system and 3) an area where a fibre-optic system would not be on offer during the lifetime of the analysis.

In this case, the basic Míla premise is wrong that there is a separate market for fibre-optic. The PTA came on the contrary to the conclusion that there is still substitutability between copper and fibre-optic connections. Reference is made to the discussion on this issue in Sections 3 and 4 in the revised preliminary draft (Appendix A), to discussion in Sections 3 and 4 here above, and in Appendix C there is discussion on the additional consultation opened by the PTA at the end of October 2020. For the above specified reason alone, it is clear that the Míla categorisation in question into 3 areas, that is based on distribution of fibre-optic networks, is not appropriate.

Míla referred to Section 4 in the Analysys Mason (AM) report from 1 July 2020, which Míla appointed as its adviser in this case. There it was stated among other things that the PTA had not, in an adequate manner, examined the possibility of segmenting the country into areas where competitive conditions on the fibre-optic market differed significantly and would continue to do so.

There were two fibre-optic networks in areas where approximately 40-55% of the nation lived. This competition had now led to significant distribution in these areas, high speed, low price to end users and higher uptake of the service, without any kind of obligations on the networks in question. This was a positive result for inhabitants in this country and something

that one should encourage. There was an opportunity to allow competition to flourish for this large proportion of citizens, which could lead to Iceland being a world leader in high-speed connections. It was likely that the copper system would be decommissioned in these areas as time progressed.

For the other 30-35% of the nation, one fibre-optic network would be on offer, which could be owned by GR, Míla, Tengir or municipality. In such areas there would in fact be a monopoly for the local network operator on either Market 3a (e.g., where the party in question leased dark fibre) or on Market 3b (if bitstream was only on offer, see e.g., GR). This local party would enjoy a very high market share and could have SMP, in a specific area or areas, even though those parties that had received state aid offered access. The party with such local monopoly would normally not be Míla, as GR and Tengir have jointly much greater fibre-optic distribution than Míla. The copper network would be decommissioned in many such areas. If not, it would exert competitive pressure on the fibre-optic party.

The rest would be areas that would, in the years 2021-2026, not have any fibre-optic network. In these areas, the Mila VDSL system would be the fastest connection, at least until 5G had been distributed in the relevant areas.

Though it would be likely that the distribution of fibre-optic networks would increase somewhat in the country, AM considered that geographic boundaries were not sufficiently unstable to hinder geographic segmentation of the country into appropriate areas.

By adhering to the position that the geographic market was the whole country and that there was substitutability between copper and fibre-optic, it was likely that the PTA would come to a wrong conclusion with respect to the designation of electronic communications companies as having SMP and by imposing obligations that were not in accordance with proportionality on the basis of the real status on the markets in question.

The position of the PTA

Analysys Mason (AM) also builds on the fundamental premise that there is a separate fibre-optic market in this country. This is not the case, as is stated in the PTA reply to a Míla comment here above. The PTA has furthermore withdrawn its intention to prescribe cost analysed prices on Míla fibre-optic, and instead has prescribed an ERT obligation, which allows the Siminn Group greater latitude in pricing. The PTA is therefore not applying as strong an intervention in pricing of fibre-optic as was indicated in the preliminary analysis.

The PTA furthermore points out that development with respect to local countryside networks has been that Míla has been purchasing them in large numbers, has ensured long term control over them or has deployed them with the support of the relevant municipality and/or the electronic communications fund. The PTA considers that development can continue in this direction, as these are significantly small and uneconomic operational units, that are not on the priority list of most municipalities for continued operation. In addition to this, it is not likely that competitive problems will arise from the small networks, as access to them is open in accordance with rules on state aid and pricing has not been a problem in such instances.

As is argued in detail in Appendix A in this document, and in Appendix C, the PTA considers it appropriate to come to the conclusion that there is still substitutability between copper and fibre-optic and that there is no reason to segment areas geographically in this country, though

there is reason to prescribe varying obligations by area. PTA obligations take these fundamental issues into account and are in the opinion of the Administration imposed on the proper party, and in addition to this are justifiable, and in accordance with proportionality.

Míla refers to the AM report. In Section 6.5, where there was discussion on competitive areas and areas with the potential for competition, and in Subsection 6.5.1, where there was discussion on the criteria used by the PTA in demarcation of areas with more competition, it was stated that the criteria in question were too strict and that in addition, those obligations that the PTA planned to withdraw in "competitive areas" were not sufficiently different from the obligations that were generally in force.

The PTA has designated a few areas, i.e., 6 in total on Market 3a and 7 on Market 3b, as areas with more competition. These are areas which accounted for 38% of the country's inhabitants, which is less than half of the households that would have access to fibre-optic systems, other than those of Míla at end of year 2020.

The criteria were too strict. Almost all demand in the areas where Míla does not have a fibre-optic system, and where GR or Tengir had fibre-optic systems, was already met by either GR or Tengir. The criteria therefore simply did not reflect the significant competitive nature of the fibre-optic market in areas where Míla did not have a fibre-optic system.

In its preliminary analysis, the PTA seems to be very eager for Siminn to use another wholesaler than Míla in the future. Were that to be the case, it would doubtless not be appropriate to continue to make a link between the questions of whether Míla was a party with SMP or whether there was more efficient competition in specific areas, and Siminn retail share.

Finally, it was stated in the AM report that though it was doubtless correct that greater competition would result from having more than two parallel fibre-optic systems, rather than only two, it was doubtless unrealistic to allow for this to happen, even in the most populated areas of the country.

The position of the PTA

The PTA reiterates that the Administration has come to the conclusion that there is still substitutability between copper and fibre-optic. For this reason, there is no separate market for fibre-optic. The PTA also relaxed the criteria in question, subsequent to the preliminary assessment being submitted for consultation on 30 April 2020. The situation is now that the area where approximately 70% of the country's inhabitants live, i.e., 17 municipalities out of 69, is designated as an area with greater competition. The PTA will subsequently update this list annually.

The PTA furthermore considers that the assertion that GR and Tengir meet almost all demand for fibre-optic in their operational territories is not credible, or at least it has not stopped or slowed down Míla fibre-optic rollout, as Míla has conducted a major fibre-optic rollout in those areas during the past years, particularly in the GR operational territory. For example, Míla fibre-optic rollout had hardly started in the year 2015, but there are now approximately 64,000 spaces in the Capital City Area, which one could estimate as at least 64% distribution,

and there are about 77,000 spaces in the country as a whole, which is well over half of the spaces at national level. As further stated in the updated preliminary draft (Appendix A), it was not possible to locate about 7% of Mila's spaces according to the National Register of Home and Business Register. These can be houses and sheds that do not fall under the definition of a home or business, a elevator house or equipment house of various kinds or houses under construction that are not yet registered with the National Registry as an apartment or company. The figures used by the PTA for the spread of Mila are therefore probably underestimated to this extent, or up to 10 thousand connections. In Mila's answer to the PTA inquiry in the autumn of 2020 in connection with this analysis, it was stated that the number of fibre-optic connections was over 90,000 nationwide. Despite repeated attempts, the PTA has not been able to obtain credible explanations for this discrepancy from Mila. To be on the safe side, the PTA relies on the lower number in this analysis. Míla's distribution plans for the coming years are furthermore ambitious and much more ambitious than the distribution plans of GR and Tengir. Those areas where GR and/or Tengir have a fibre-optic network and Mila does not, are therefore decreasing rapidly, and the PTA expects that the gap will diminish significantly in this connection during the lifetime of the analysis.

AM further considers that the obligations that the PTA plans to withdraw in "competitive areas" are not adequately different from the obligations that in general should apply. Given the potential competitive problems that have been identified, the PTA considers it not justifiable to go further in varying obligations in this instance. In the opinion of the PTA, the access obligations that the PTA proposes should not apply to Mila in specific areas, are not insignificant. In addition to this one can point out that the PTA has now withdrawn its intention to impose the obligations on Mila that the company has most criticised, i.e., for cost analysed prices for fibre-optic, and has instead proposed an ERT obligation. Latitude for pricing within the Siminn Group will therefore be greater than was allowed for in the preliminary assessment.

AM also noted that if Siminn were to make an agreement with other wholesalers than Míla, it would doubtless not be correct to continue to connect the question of whether more competition pertained in specific areas with the Siminn market share in retail.

Siminn has now made an agreement on bitstream access to the GR fibre-optic network, and Siminn commenced service on GR's network in late august of 2021. On the basis of data from both Siminn and GR, the PTA does not expect that a large number of Siminn customers will switch from Mila systems to the GR system. An influencing factor here is that Mila will continue to increase the density of its fibre-optic network in the operational territory of GR during the lifetime of the analysis, and another is that a significant proportion of Siminn's new customers are doubtless already on the GR network, i.e., that Siminn will acquire customers that are already in the GR system that have received service from Siminn competitors at retail level. Siminn has not made an analogous agreement with Tengir, but Siminn says that such exploratory negotiations are ongoing.

The PTA considers that while Míla is a subsidiary of Siminn, it is inevitable that one criterion for choice of areas with greater competition is related to the Siminn retail share. Despite the above specified agreement between Siminn and GR, the parties agree that by far the largest part of Siminn business will continue to be on the Míla network.

The PTA agrees with AM that it is undoubtedly unrealistic to expect that parallel networks of more than two parties will be a reality in this country. The PTA has however, not considered that it is a mandatory condition for it being possible to segment geographic markets in this country. The PTA came to the conclusion, on the basis of the premise that there is still substitutability between copper and fibre-optic and having conducted a detailed assessment of competitive conditions between areas in this country, that there was no reason to segment geographic markets in this country for the time being at least, but there was reason to apply varying obligations by area.

Siminn stated that there were significantly differing competitive conditions between the GR operational territory, the Tengir operational territory and other locations. There were differing competitive conditions in many municipalities such as in Reykjanesbær, where the company Kapalvæðing was already operating. One also needed to assess the likely development in the Westman Islands and possibly at other locations with the entry of Nova with Internet service over 5G. Then one needed to examine the situation in the West Fjords, in Hvalfjarðarsveit, Skeiða- and Gnúpverjahreppur etc., where local fibre-optic systems have been deployed. In any event, the operational areas of Tengir and GR were clearly separate from other areas. All metrics indicated that these were separate areas, for example difference in market share, difference in competitive restraint, difference in service offer and the fact that neither demand-side substitutability nor supply-side substitutability was in place.

For this reason, it was Siminn's assessment that the following postcodes form one market area:

- a) **GR area I** Reykjavík, Seltjarnarnes, Kópavogur, Garðabær, Hafnarfjörður, Akranes, Borgarbyggð, Hveragerði, and Ölfus. According to Statistics Iceland, these areas had 96,500 homes.
- b) **GR area II** Hella and Hvolsvöllur. It was estimated that about 700-800 dwellings were at these two locations. According to Statistics Iceland, there were about 1500 dwellings in the municipalities that these urban kernels belong to, where about half of them lived in urban areas.
- c) GR area III Reykjanesbær, Vogar and Árborg.
- d) **Tengir area I** Akureyri, Eyjafjarðarsveit, Hörgársveit, Svalbarðsstrandarhreppur, Þingeyjarsveit, Dalvíkurbyggð, Grýtubakkahreppur and Skútustaðahreppur. According to Statistics Iceland, these municipalities had about 10,000-11,000 homes.
- e) **Tengir area II** Ólafsfjörður, Norðurþing and Tjörneshreppur.
- f) Area with more than 50% distribution from other parties.
- g) Area that did not have 50% distribution, i.e., all other areas than those specified here above.

Siminn considered that the above specified areas were a separate market. GR area I and GR area II were areas where GR had achieved 100% distribution and had more than 50% share in connections. GR area III comprised areas where 100% distribution would be achieved in the coming 2-3 years. Tengir area I was an area where Tengir had achieved up to 80-90%

distribution and had over 50-60% share in connections. Tengir area II was an area where Tengir would achieve 50% distribution, but plans were unclear. In general, area I was an area where a company other than Míla had achieved over 50% distribution while the remainder was where Míla had on its own over 50% distribution.

The position of the PTA

The PTA has provided arguments here above as to why the PTA considers municipal boundaries to be a more appropriate reference for geographic analysis here in this country and refers to that. Furthermore, that there is no separate fibre-optic market, as there is substitutability between copper and fibre-optic.

The PTA furthermore refers to detail its geographic analysis in Sections 6 and 7 in the revised preliminary assessment (Appendix A) and to the general Section on geographic analysis in Section 5 in the appendix in question. The PTA considers that the methodology applied by the Administration is both in accordance with guidelines and recommendations from ESA and with the BEREC common position from 2014 and geographic analysis and with the competitive conditions that pertain in this country. The proposal for areas submitted by Siminn here does not fit the methodology applied by the PTA and the PTA hereby rejects it. Individual areas named by Siminn here above, are examined and assessed within the methodology applied by the PTA, as are all other municipalities in the country. With respect to the reference to 5G rollout, particularly in the Westman Islands, this comment has been answered in Sections 3 and 4 here above, in addition to which the subject is discussed in the same sections of the updated preliminary draft (Annex A) and in Annex C.

6.4 The position on the retail market, with respect to geographic analysis

Míla refers to paragraph 464 where it was stated that market analyses in the EEA had generally shown that on the retail markets for standard broadband connections and high-quality connections, there would be a lack of competition if obligations on the underlying wholesale markets (one or both), particularly in states where there is only one network with national coverage, were not in place. In this country, it is only the Míla network that has national coverage, and it would therefore be likely that the situation on the relevant retail markets here would be similar to what is generally the case within the EEA, if obligations at wholesale level were not in place.

Míla considered it clear that in the lifetime of the analysis, Míla would not own a local loop network with national coverage and that was the real situation when the market analysis came into force with respect to the decommissioning of PSTN and copper in the countryside. In the same way, GR planned to have a network with national coverage during the lifetime of the analysis. The premise that the PTA assumed that Míla would be the only party with a network with national coverage would not be correct in a forward-looking analysis.

The position of the PTA

The PTA considers, on the basis of the gathering of data conducted by the Administration, that it was safe to say that Míla would control an electronic communications network in the form of copper and/or fibre-optic local loops, that would be to all intents and purposes with national coverage during the lifetime of the analysis and that it will cover well over 90% of connectable spaces throughout the lifetime of the analysis. The PTA considers in the light of considerable development and volatility on the relevant wholesale markets and related electronic communications markets, that it is injudicious to estimate that the lifetime of this analysis will be longer than 3 years, even shorter if there are significant changes on the market, which the PTA considers not inconceivable.

At the end of 2020, the number of copper local loops in use with Míla was about 58,000, and they had decreased from about 114,000 since end of year 2016. At the end of 2020, fibre-optic local loops in use from Míla were about [...], whereas they were only just under [...] at the end of 2016. At the end of 2020, Míla had deployed fibre-optic local loops to at least 77,000 homes and companies in the country, but as stated above, the PTA considers this to be a significant underestimation. The development during the last 3-4 years with Míla has therefore been in the direction that the number of copper local loops in use has decreased significantly while the number of fibre-optic local loops in use has correspondingly increased significantly. Despite the fact that Míla has lost some market share on Markets 3a and 3b, the company's position is still very strong on the relevant markets, as the company had a market share of 57% on both Markets 3a and 3b at the end of 2020.

In a Míla reply dated 22 September 2020 to a query from the PTA dated 7 September last year, Míla, for the first time, provided information on its plans for phased decommissioning of the copper system over the coming 10 years. Míla made the reservation to the plan that it was still subject to a number of uncertain factors and that Míla had not been able to make a specific prediction of the number of connected copper local loops in the next years. The decommissioning was planned in 3 phases. The first phase, which covered the next 5 years, included locations where fibre-optic rollout had started, was well under way or completed. Míla said that this should apply to the whole of the countryside (Iceland Optical Connected project), to the Capital City Area and to urban areas to which the above description applies.

Míla has now deployed fibre-optic to at least 64% of households and companies, and probably more, in the Capital City Area and according to the Míla distribution projection for the coming years, it seems clear that Míla will continue to vigorously increase the density of the company's fibre-optic network in that area. The PTA considers it unlikely that during the lifetime of the analysis, the company will decommission its copper local loops in spaces in those areas where the company has not deployed fibre-optic. The same applies to urban kernels in the countryside.

With respect to sparsely populated areas, where fibre-optic networks have been deployed by municipalities with state aid, they are a very small proportion of the whole, i.e. just over 6000 addresses, or 3-4% of local loops for the whole country, and doubtless only around 2-3% if one only counts the spaces where Míla has not purchased the networks in question, ensured long-time control over them or deployed with a grant from the relevant municipality and/or electronic communications fund. The PTA considers this development could well continue during the lifetime of the analysis. Míla has leased local loop access to the vast majority of

those country networks that remain and offers bitstream access to them. The PTA considers it clear that the local fibre-optic networks in question do not distort the large picture with respect to competitive conditions on the relevant markets.

At the turn of the year 2020/2021, many assets and operations were moved from Siminn to Míla, among other things, the mobile phone distribution system (RAN) and the IP-MPLS system. A service agreement was made between the companies at the same time that assured Míla guaranteed business with Siminn for a significantly long period of time. This strengthens Míla's position on the relevant markets and provides the company with increased possibilities for product development, both with respect to fixed line networks and mobile network solutions. Up to this point in time, Míla has been financed at the Group level, but the company has the possibility of financing itself at attractive terms, as interest on patient capital to infrastructure companies is generally much lower than interest to service providers on the electronic communications market. It should assure the company capital at attractive terms to put even more effort into the company's fibre-optic rollout during the lifetime of the analysis.

It is not foreseeable that any party other than Míla will be close to controlling a fibre-optic network with national coverage, and certainly not a copper network, during the lifetime of the analysis. Although the GR fibre-optic network reaches more than half the spaces in the country, geographic distribution of the network is only linked to the south-west corner of the country. Given the data from GR dated 22 October 2020, it is not very likely that the company's distribution will increase to any significant degree outside the south-west corner of the country during the lifetime of the analysis, on Market 3a. It is however not inconceivable that GR operational territory could expand across the country on Market 3b if the company made an agreement with a company like Tengir and/or the local countryside networks. Shortage of trunk leased lines at a reasonable price could however make such GR plans difficult.

Míla referred to paragraph 465 where it was stated that in mid-2019, the GR fibre-optic network had reached about 70% of households in the country but they were all in the southwest corner of the country, i.e., 97,653 households of about 140,000. At the end of 2019, the GR connections were 102,231 of 140,700 households or about 73%. The Tengir network had in mid-2019 reached about 7% of the country's households but only in the north and northeastern parts of the country. The fibre-optic networks of GR and Tengir thus reached about 80% of the country's households. One could therefore expect that the GR and Tengir connections would increase somewhat during the lifetime of the analysis, although it was likely that this would be insignificant in terms of percentage. The Míla market share of the wholesale market in question was however very small, standing at 63% at a national level on M3a and 58% on M3b. During the lifetime of the analysis the Míla market share was not expected to decrease substantially on the wholesale markets in question.

Míla in fact considers there to be no grounds for the PTA assertion that during the lifetime of the analysis this situation would not change. GR had revealed that the company planned to have a system with national coverage within 5 years. The company had also revealed, according to paragraph 399 that it planned to increase its distribution in 2020 to about 26,000 homes and companies, i.e., about 25% in one year.

At the same time Tengir was developing with the same energy as before, i.e., about 1000-1500 homes per annum as the company had done in recent years. The company was thus increasing its distribution by about 15-20% per annum.

There was no discussion about Snerpa, which had plans for development across the whole of the West Fjords.

With these distribution plans, one could expect that by the end of 2020, these companies would have completed fibre-optic rollout to over 90% of the homes and companies in the country and at end of year 2021, more than 92%. This did not include the 4000-5000 homes that had been connected with fibre-optic through Iceland Digital Connected. If all this were counted together, parties to the market had made plans for their fibre-optic rollout to reach almost 95% of homes at the end of 2021. There appeared to be no attempt made to take this into account, or to try to get a picture of development of the market in the coming years.

The position of the PTA

In its revised draft analysis (Appendix A), the PTA will revise those distribution figures presented in paragraph 465, on the basis of more precise figures that the PTA has gathered on total number of spaces (homes and companies). The PTA will furthermore endeavour to make a projection on development of distribution during the lifetime of the analysis, though this could prove difficult, not least because Míla did not respond to such a request from the PTA in September 2020 in an adequate manner, but rather only referred to the capital that would be invested in fibre-optic in the coming years. Given those figures, Míla plans not to relax its fibre-optic deployment compared to the last years, while the distribution plans of GR and Tengir are modest compared with recent years. The PTA repeatedly requested Mila's distribution plans for 2021 in January, February and until the beginning of March 2021, but no response had been received by the end of April that year. Mila's roll-out plans were finally received in mid June 2021.

According to information from GR, dated 22 October 2020, the company's fibre-optic local loops reached about 109,000 spaces on 1 October 2020 and the company expects that they will have reached about [...] at the end of 2023. Should this happen, the fibre-optic deployment that the company has conducted in recent years will be significantly reduced. In a reply from Tengir dated 6 October 2020, the company's fibre-optic local loops reached 11,152 spaces and the company predicts an increase of about [...] local loops per annum until the end of 2023, which means that they will then be about [...]. However, the PTA bases its analysis on the fact that Tengir's fibre-optic local loops reached about 9,500 spaces at the end of 2020, cf. figures from the PTA Infrastructure Database (GAF), for the same reasons as mentioned for Mila above. This is a total of about [...] spaces of approximately 163,000, which is about [...]% of the country's spaces at the end of 2020, and according to the company's plans, they should have reached about [...] at the end of 2023 or about [...]% of the total spaces in the country based on an annual increase in local loops of 3,000.

According to figures from Míla dated 1 October 2020, the company's fibre-optic local loops then reached about [...] spaces, of which there were about [...] homes. The Míla plan allows for the number to have reached just under [...] spaces at the end of 2020. As stated above, the PTA will however presume that the Mila fibre-optic local loops have been at least 77,000 at the end of 2020, but as previously stated, this is undoubtedly a considerable underestimation.

As previously stated, Míla could not provide plans for new connections to the end of 2023 but given the projection on investments in the coming years, that were little less than in previous years, it is clear that the number of Míla fibre-optic connections during the lifetime of the analysis will increase by many thousands each year until the end of 2023. The roll-out plan received mid June 2021 confirms this projection. The PTA also refers to the above specified agreement on transfer of specific assets and operations from Siminn to Míla, which should create even more latitude for Míla for faster fibre-optic development in the coming years. This means that there is every likelihood that there will be a significant levelling of the number of fibre-optic connections of Míla on the one hand and GR and Tengir on the other during the lifetime of the analysis.

Míla maintains that GR has informed that the company plans to have a network with national coverage within 5 years. Given the above specified information from GR, the company still has a long way to go to achieve this during the lifetime of the analysis. Furthermore, it is not correct when Míla says that Tengir will increase its number of connections by 1000-1500 per annum during the lifetime of the analysis. The correct figure is that the company intends to increase them by approximately [...] per annum.

With respect to Snerpa, the company's fibre-optic local loop network had reached 1.177 spaces at the end of 2020. The company estimates that they will increase by approximately [...] connections per annum until the end of year 2023 when they would then be approximately [...]. It is clear that the Snerpa fibre-optic network is very small in the grand scale of things and hardly reaches 1% at a national level, and thus has no impact on the competitive conditions to any significant degree, on the relevant markets in this country. Austurljós has also laid 200-300 fibre-optic local loops in Egilsstaðir and the company has very modest distribution plans for the lifetime of the analysis.

It is therefore wrong when Míla says that the above specified companies had already rolled out fibre-optic to over 90% of total spaces in the country at end of year 2020. The correct figure was that this proportion was about [...]%. It is also wrong that when Míla says that the companies will have rolled out fibre-optic to over 95% of total spaces in the country at end of year 2021. It is much more likely that this proportion will have reached about [...]% at the end of 2023.

Míla refers to paragraph 466, where it is stated in the above specified Section 3.2.6 in the preliminary draft that the Siminn Group's strong position on the retail market, where the company's market share appeared no longer to be decreasing and to be strengthening again with just under 50% market share in mid-2019 and on the above specified wholesale markets, strongly indicated that if it was not for wholesale obligations, the Group could operate without concern for competitors or consumers and could continue with access barriers to infrastructure, systems and service. The Siminn market share of the retail market had in reality only decreased by a very few percentage points since the last PTA analysis of the wholesale markets in question in the year 2014 and this share now stood at just under 50%. It is a main principle in competition law that market share of over 40% gave a general indication that the company in question had market dominance and when market share was 50% there had to be very good reasons for this not to apply. Despite the entrance of Nova to the market in question in recent times and the merger of Vodafone and 365 in 2017, the Siminn market share had

increased somewhat recently. At the same time the company's main competitor, Vodafone, had lost significant market share.

Míla stated that in this connection it was worthwhile noting that Vodafone now offered its customers an apology in advertisements in the media for poor service in recent years. One could not see otherwise than that the company thus recognised that the merger between Vodafone and 365 had not proceeded as expected because of service problems, and not because of actions of parties to the market.

Míla had already lost about 20% of its market strength during the lifetime of the existing analysis. Míla did not see any attempt by the PTA to present statistical arguments, e.g., by examining likely development in the coming years. It was clear that with the coming of 5G service, the situation would change even further and that competitors aimed to rollout fibre-optic to about 50% of those areas that remained to be connected during the years 2020 and 2021. Nor was there any attempt made to be forward-looking in this analysis. Míla raised serious objections to this. The nature of duopolies, as was actually the case in the local loop market in Iceland, meant that if one party had less than 50% market share then the other one had more than 50%. Despite this, no attempt was made in this market analysis to assess the GR position on the market.

The position of the PTA

In the Section on competitive problems in the preliminary draft, the PTA describes various real and potential competitor problems that Siminn competitors in retail have faced in recent years. Among other things, Siminn has achieved good results since 2015 with its Home Package, which includes various types of electronic communications service and popular TV content. From the end of 2015 until end of 2020, the number of Siminn connections increased by 4,918, and because the total number of connections has increased somewhat during the period, Siminn market share has dropped by 2.5% during these 5 years, that is to say from 48.8% to 46.3%. This must be considered a good result over such a long period of time at the same time as there have been various fluctuations on the market, for example with the merger of Vodafone and 365, the powerful entry of Nova on the fixed line market and the slow and steady increase at Hringdu.

Vodafone had 29% market share at the end of 2015 and at its highest was 37.1% market share at end of year 2017, after the merger with 365, which had had about 11.7% market share at end of year 2016. From the beginning of 2018 the Vodafone market share has dropped rapidly and stood at 27.7% at the end of 2020. One can say that Vodafone has lost the equivalent of all those customers that the company inherited from 365 and is in a bit worse position to which the company was in at the end of 2015. Although Vodafone has recognised that there have been various problems in its service to its customers subsequent to the above specified merger in 2017, among other things the issuing of incorrect invoices, the PTA does not consider that that alone explains this development, only to a certain extent. The company is still losing market share.

Nova entered the fixed line market in 2016 and has shown steady growth and the company's market share was 14.7% at the end of 2020. Hringdu then stood at 8.6%, and the company has increased its market share on a yearly basis, but to an insignificant amount between the years. Other smaller parties share just under 3%. For this reason, it seems that Nova has

sought almost all of its market share to Vodafone, while Siminn has remained on course. This indicates a very strong Siminn position and the position of the Siminn Group as a whole on the Icelandic electronic communications market. Siminn has now made an agreement on bitstream access to the GR fibre-optic network and the PTA considers it axiomatic that the Siminn market share will for this reason, all things being equal, increase somewhat at the cost of other parties that were already on the GR network, such as Vodafone, Nova and Hringdu. It is not injudicious to conclude that Siminn will for these reasons, exceed the 50% market share hurdle during the lifetime of this analysis. It is difficult to predict at whose cost this will be, or how the internal division of their potential declining market share will be in the coming years. Various things could however occur for this development not to become a reality, but at this point in time, the PTA cannot see what they could be.

Míla mentions that the company had lost market share since the last analysis in 2014. It is true that Míla lost some market share on the relevant wholesale markets, especially on market 3a, but one must look to the fact that the company was in a totally dominant position at that time. At the end of 2020, the Míla market share on both Markets 3a and 3b was 57%. This must be considered a significantly strong position. Given information from Siminn and GR one can expect quite a number of Siminn customers to move from the Míla network to the GR network during the lifetime of this analysis because of the above specified agreement on the entry of Siminn into the GR network. One can also assume that Siminn will gain customers that were already on the GR network and are thus not coming from the Míla network. In the opinion of the PTA, it is not likely that the above specified agreement on its own will lead to Míla market share on the relevant markets dropping except by a very few percentage points during the lifetime of the analysis and will probably still be over 50% on both markets at the end of the lifetime of the analysis.

Nor can one exclude the possibility that market share figures at wholesale level will have changed during the lifetime of the analysis, to Míla's advantage, for example if parties like Vodafone and Nova, who today are both customers on the networks of Míla and GR, should move their custom to greater degree over to Míla. The PTA here reminds that the above specified agreement on transfer of assets and operations, from Siminn to Míla, which gives Míla the opportunity to increase and change its service offer. Today, Vodafone, Nova and Hringdu have far more customers on GR networks than on Míla. It is very difficult to make predictions about this, despite the fact that the PTA has endeavoured to gather information on this from service providers.

With respect to the potential development resulting from deployment of 5G networks, it is difficult to make predictions. The PTA sought information in September 2020 from Siminn, Vodafone and Nova about potential deployment of 5G networks, but what their answers had in common was that there was a great uncertainty about such distribution and its potential impact. For this reason, the PTA could not adequately predict the impact 5G rollout will have on the relevant wholesale market, nor how quickly such an impact would manifest itself. At this point in time, the PTA considers that the potential impact will not be significant during the lifetime of this analysis. Should anything come to light to the contrary, the PTA will immediately commence a new analysis of the relevant wholesale markets.

Míla maintains that Míla competitors planned to roll out fibre-optic to about 50% of the areas that remain to be connected during the years 2020 and 2021. The PTA considers this most

unlikely and refers to its reply here above with respect to planned fibre-optic network deployment during the lifetime of the analysis.

The PTA also totally rejects that no effort was made to assess the GR position on the relevant markets. This is absolutely untrue, as there was discussion on the company's position in many places in the analysis. This discussion is by the nature of things, based on the fundamental premise that there is still substitutability between copper networks and fibre-optic networks. Have that not been the conclusion, the analysis would have been different, as one would have had to analyse one market for copper networks and another for fibre-optic. When considering separate markets for fibre-optic, the investigation of this matter was somewhat different than Mila's when one allows for the existence of substitutability.

Míla refers to paragraph 473 where it was stated that Siminn provided retail service for broadband services across the country as the former monopolist incumbent in electronic communications in this country. The company did this first and foremost by offering high speed connections over fibre-optic and VDSL. At occasional locations, the company only offers upgraded ADSL connections, but examples of this are rapidly decreasing. The company thus enjoys what is called ubiquity on the market in question.

Míla said that the PTA had emphasised that individuals and companies were served in sparsely populated areas of the country in the same manner as in other areas. Míla and Siminn have been those companies that have served these areas best, despite the fact that from a cost point of view it would not have paid because of substantial start-up and operational costs for a few connections. The PTA here seems to come to the conclusion that the competitive position of Siminn/Míla was better than others because of this. Míla was now to be punished for this with increased obligations on those markets where most competition pertained. Míla objected strongly to these PTA plans.

The position of the PTA

In the referenced paragraph in the preliminary draft, there was simply a description of the fact that Siminn provided broadband service across the whole country, the only company in this country. The Siminn Group is a former monopolist incumbent in electronic communications in this country and benefits from this with an electronic communications network with close to national coverage, which to great degree was developed over a period of decades, that is to say the copper part of the network. Because of this and having taken into account the number of other factors that have been discussed in this analysis, the PTA considers that the Siminn Group is in a much better competitive position than the competitors of the Group, both at wholesale and retail levels. It is not correct when Mila says that because the Siminn Group has been providing service to all citizens that the PTA will punish Mila with increased obligations. Imposition of obligations depends on the potential and real competition problems that are identified in each instance. The PTA would also like to remind that the Administration has now withdrawn the intention to prescribe a cost analysed prices obligation on Mila fibre-optic on the relevant wholesale markets, and instead to prescribe an ERT obligation.

There is no longer a universal services obligation on Siminn to provide electronic communications services across the whole country, but this obligation does rest on Mila with respect to connections to the public electronic communications network, see PTA Decision

no. 31/2017. The universal services obligation in question applies, unchanged until the end of 2022.

Siminn has been working on the decommissioning of the old public switched telephone network (PSTN) and completed the first phase of this project on 1 October 2020. It is was planned that the system will be fully decommissioned at the end of 2021 in rural areas and that could be several hundred connections, but delays to this full decommission are likely. It is not the plan to dismantle the copper network in this project.

Electronic communications systems based on analogue technology have in recent years been replaced by digital networks which are considered more economic in operation and provide consumers with a better service experience. Users are connected with a copper thread and the system reaches more than 99% of households in the country. The technological change in discontinuing use of analogue electronic communications networks to the adoption of digital electronic communications networks is thus inevitable, and this development has been taking place worldwide. Iceland is in a leading position in international comparison when it comes to deployment of high-speed networks. This is such that about 97-98% of the country's inhabitants have access to high-speed fixed line connections, fibre-optic or VDSL, and 3G mobile phone service reaches 99.97% of the population. Iceland is therefore in a good position to embrace the technological changes that are ahead.

In individual instances, there are households that do not have a connection, such as fibre-optic or a short copper local loop, which can carry digital telephone service or usable Internet service. It is clear on the basis of the Siminn prediction model that there will be some instances where homes or workplaces will lose all electronic communications connections with the closing of the PSTN voice telephony system. No such instances were however expected on the completion of the first phase. In such instances one has to guarantee such connections, for example through wireless, satellite or by taking measures to receive and amplify mobile phone signals, if this is an option.

In order to react to this situation, the PTA nominated Neyðarlínan ohf., a service provider to provide electronic communications connection for telephone service and usable Internet service in the special cases, see PTA Decision no. 9/2020, dated 25 September last year. So, no one should be without a connection after the old telephone system has been decommissioned. The function of Neyðarlína ohf. will be to monitor that such connections are configured if there is a need and that this shall be done in cooperation with other electronic communications companies where possible. It is established that some users need to make changes to their electronic communications service after decommissioning of the PSTN system, for example to order digital service (VoIP) through copper local loop, which will still be in use despite the decommissioning of the PSTN system, (until this system is closed in phases over the next 10 years), or through activating a fibre-optic connection which has been deployed to buildings at many locations in the country, the most sparsely populated areas are there included.

Míla refers to paragraph 475, where it was stated that the Siminn market share had been about 48% on the relevant retail market at national level in mid-2019. The Siminn market share by municipality varied somewhat. In the Capital City Area (Reykjavíkurborg, Kópavogsbær, Seltjarnarnesbær, Garðabær, Hafnarfjarðarkaupstaður and Mosfellsbær) Siminn would have

about [...]% market share while a common market share for the company outside this area would be in the range of 65-85%, apart from in those municipalities where GR or a local network is operated.

Míla pointed out that according to this paragraph, the Siminn retail share was said to be in the range of [...]% in the Capital City Area as a whole. Míla considered that as such, Siminn did not have SMP in the Capital City Area and immediately for this reason, obligations should be withdrawn on the relevant markets or at the very least obligations should be made lighter, and not increased as the PTA intended to do.

Míla considered that nowhere in this market analysis did the PTA attempt to assess market share during the lifetime of the analysis, which however should be one of the fundamental premises for a well conducted market analysis pursuant to guidelines from the EU Commission.

It was clear that solely the decommissioning of the PSTN system that Siminn had notified would be completed in the first quarter of 2021, would mean that Míla (and Siminn) market share decreased, as there were between 10 and 20 thousand local loops without data transfer that only served PSTN while that service was on offer. Míla did not consider it right to apply obligations in geographic areas where there seemed not to be a competitive problem in its retail sector. By imposing price control on Míla, one was in reality, letting Míla customers in a competitive area subsidise service where other network operators did not want to develop service. GR and Tengir did not need to take part in this subsidising, which led to a significant distortion of the Míla competitive position, and furthermore to flexibility in pricing being little, when circumstances changed, as all analyses had to go through a lengthy process with the PTA.

The position of the PTA

Míla refers to the PTA analysis, saying that Siminn should not be considered to have SMP in the Capital City Area, as the company only had [...]% market share. For this reason, obligations should be withdrawn or at least made lighter.

The PTA notes that it is the conclusion of the analysis, both at retail and wholesale levels, that there is no reason to segment geographic markets in this country. Which is why the PTA looks first and foremost at the country as a whole. When this is done, it is clear that the Siminn position on the retail market, of having 46% market share, and Mila having market share of 57% on the relevant wholesale markets, is extremely strong. At the end of 2020, Síminn's market share was [...]% in the capital area and just under [...]% in when considering GR's entire operating area. In its preliminary draft, the PTA came to the conclusion that potential and identified competitive problems were significant on the relevant wholesale markets and related retail markets and considered that there was a reason to increase obligations on Mila, among other things by imposing a cost analysis obligation on the company's fibre-optic. Subsequent to consultation, the PTA reversed this and decided instead to prescribe an obligation for ERT, which gives the Group greater latitude with respect to pricing than the cost analysis obligation. An additional consultation was held on this change in PTA plans. The PTA then came to the conclusion that there was reason to have differing obligations between areas and among others the whole Capital City Area now belongs to an area with

lighter obligations, but in total there are 17 municipalities, where about 70% of the country's population lives, that fall under that area.

The PTA once again rejects that the Administration had not been forward looking in its analysis. The PTA refers to previous replies on this issue here above.

Míla mentions that solely the decommissioning of the PSTN system would mean that Míla (and Siminn) market share would decrease, as there were between 10 and 20 thousand local loops without data transfer that only served PSTN while that service was on offer. The PTA refers to the answer here above. In the opinion of the PTA, it is likely that the Míla market share will diminish somewhat on Markets 3a because of the closing of the PSTN system, but nevertheless it is the PTA assessment that when considering development of this factor and others that are important, that the Míla market share will continue to be over 50% during the lifetime of the analysis. As has been previously explained, various things could happen on the market in the coming years that would increase Míla market share, such as if service providers like Vodafone and Nova would increasingly migrate from the GR network to the Míla network. The PTA considers this not inconceivable.

One must also keep in mind that Market 3a covers all local loop lease, both those that are used for voice telephony and/or Internet service, but also for other requirements. Internet service is the fundamental use of local loops and the retail metric on which it is most appropriate to base one's examination of the market.

The PTA reiterates that the Administration has decided not to impose a cost analysis obligation on Míla fibre-optic on the relevant wholesale markets, but instead an obligation for ERT. Such an obligation provides the Siminn Group with greater latitude with respect to pricing than the cost analysis obligation. In the opinion of the PTA, the rapid Míla deployment of its fibre-optic since the last analysis was made, and the identified potential and real competitive problems result in the PTA considering it to be unjustifiable that the Siminn Group be totally without obligations on price control. For this reason, the PTA considers that an obligation on cost analysed wholesale prices for copper local loops and an obligation to withstand an ERT test for fibre local loops are justifiable, and in accordance with proportionality but in the opinion of the PTA, such an obligation is a mixture of a non-discrimination obligation and an obligation for price control.

Míla refers to paragraph 476, where it is stated with respect to the Siminn pricing policy, that it was not possible to determine any distinction in this policy by geographic area. The same applied to connections of Siminn competitors where they were operated.

Míla pointed out that there was in reality a price difference between areas. In GR competitive areas, setup of service was free, and a full charge was paid elsewhere, but the cost of setup could be significant.

The position of the PTA

The PTA will answer the above specified comment in Section 6.5.5 here later.

Míla refers to paragraph 477 when it was stated with respect to the quality of connections, that it was not possible to identify a difference by geographic areas where the relevant access technology was on offer. Quality of the access technology was thus comparable between areas. There was nothing to indicate otherwise than that this was also the reality with Siminn competitors, as in many instances it is the same underlying wholesale product which provides retailers with access to the customers. Other internal quality aspects in the operations of retailers, such as their core systems, capacity of their foreign connections and other aspects that can impact on consumer experience, appeared to be comparable.

Míla pointed out that VDSL with vectoring was on offer in competitive areas, but not elsewhere. Also, that in competitive areas, the practice was generally to offer 1 Gb/s fibre-optic connections, but outside these areas only 500 Mb/s. This means that there was a difference in speed by geographic area, though the PTA asserts otherwise.

The position of the PTA

The PTA points out that the above specified paragraph describes the situation at retail level. The Administration stands by its assertion that it is not possible to determine a difference by geographic area with Siminn or Siminn competitors with respect to quality of connections, given that the relevant access technology is available.

Míla points out that VDSL with vectoring is only on offer in competitive areas and not elsewhere, and that it was therefore not correct when the PTA stated that there was no difference in speed by geographic area. Míla states that "competitive areas" comprises the Capital City Area and Akureyri.

With an email dated 17 November 2020, the PTA directed the questions to Míla as to what the main reasons for the company were not using vectoring outside the alleged "competitive areas", what was the proportion of their customers that had requested that vectoring be disconnected, where vectoring was on offer and whether some problems had arisen related to the quality of broadband service when using vectoring. The PTA finally requested a detailed list of municipalities where vectoring was on offer and requested information on the proportion of VDSL connections that had vectoring of the total number of connections in use in the country and by municipality. A reply was received from Míla on 25 November 2020.

Míla stated that the company had made a decision on upgrading the VDSL system with vectoring at the end of 2014. The initial investment had been on the basis of the above specified "competitive areas" and the upgraded system had been quickly implemented and it was up and running about mid-2015. This service had thus been on offer for service providers, but it was they that had a business relationship with users, and they decided which service would be installed with their users. At the end of 2015, it had been decided to focus using existing infrastructure and to emphasise investments in fibre-optic (FTTH) rather than continue with the temporary step represented by vectoring. Investment in xDSL and copper lines had thus been limited in recent years.

It was stated there by Míla that the VDSL system was *good in most locations*. There was significant cost in vectoring and the gains, among other things by increased revenue, were small. For this reason, the Míla board had not wished to sink additional investment funds in

services based on copper, but rather the emphasis had been placed on deploying fibre-optic and on the development of related services.

Míla therefore considered that the Míla reasons were based on marketing, cost, and even technical premises. With VDSL connections having declined in those areas where fibre-optic had been deployed, some vectoring-compatible equipment was freed up, though not much. This meant that Míla did not have the capacity to cover a whole new urban area with vectoring-compatible equipment and from a marketing point of view it was difficult to offer a proportion of the customers in a municipality more speed without new investments in equipment. For this reason, Míla had moved less equipment than would have been desirable.

It was furthermore stated that in total there were [...] VDSL lines in the Míla system and that the company had not recorded separately in its systems the reasons why vectoring had been disconnected where it was on offer. On the other hand, Míla could see in its systems, the number of existing active lines that had at one point in time been configured with vectoring but were not configured with vectoring today. This proved to be [...] lines. Today there were about [...] VDSL lines with vectoring of about [...] active connections that had the possibility of vectoring, which is about [...]%.

It was then stated in the Míla answer that there had been some problems activating vectoring at the beginning, and that furthermore, not all endpoint equipment supported vectoring, particularly not equipment owned by users. The problems mainly related to incorrect installation of in-house lines, for example, when a line splitter was lacking or where lines in the same in-house cable were used for other connections. When vectoring had been activated initially, lines had been moved over to vectoring in considerable number, mainly lines of Siminn and Vodafone. Lines had mainly been selected that were most stable, according to the Míla monitoring system. Despite this, specific problems had arisen that would have resulted in interference in some of the lines which would have ended with service providers requesting that these changes be stopped. After that, service providers had only put lines into vectoring themselves, and then generally because of user requests.

It finally was stated that the proportion of VDSL connections with vectoring was [...]% at a national level. The proportion was [...]% in Garðabær, [...]% in Seltjarnarnes, [...]% in Akranes, [...]% in Kópavogur, [...]% in Reykjavík, [...]% in Mosfellsbær, [...]% in Hafnarfjörður [...]% in Hveragerði, [...]% in Ölfus municipality and [...]% in Akureyri.

Given the Míla answers, PTA does not consider it possible to read from the above specified information that the division with respect to vectoring is as asserted by Míla. It is clear that vectoring is on offer at a number of locations outside the Capital City Area and Akureyri, such as in Akranes, in Hveragerði and Ölfus. This means that the average use of vectoring in the locations in question mentioned by Míla is only [...] of those who have it as an option. This means, in the opinion of the PTA, that it is not possible to conclude that the situation is generally such that vectoring is on offer in the Capital City Area and in Akureyri, but not outside the Capital City Area, such that it would be normal to segment markets geographically according to this. For that to be the case, vectoring is not sufficiently general within the Capital City Area, and in addition to this, it is on offer at a number of locations outside the Capital City Area.

Another thing that the PTA reads out of these data is that users have generally considered an xDSL connection adequate, among others with respect to speed, that they have not in large numbers requested vectoring on the connections. As vectoring and doubling of the speed of connections that it returns, is provided without a separate charge, this supports the PTA conclusion on the insignificant weighting of speed in substitutability assessment of the analysis. This is in accordance with the conclusions of the above specified consumer survey, and strongly indicates that there is still substitutability between copper and fibre-optic connections.

Míla also points out that in "competitive areas" 1 Gb/s is on offer but only 500 Mb/s outside those areas and for this reason it was not correct for the PTA to say that there was no difference in speed by geographic area. In the opinion of the PTA, this difference is immaterial for users today and it is not likely that it will be so during the lifetime of the analysis. 500 Mb/s connections are extremely powerful. It should not be particularly difficult or costly for Míla to upgrade speed to 1 Gb/s if there was demand for this.

Siminn commented on the competitive conditions in the GR territory. The company pointed out that there was no doubt that competition was fully active in the Capital City Area. It was established that the price of Internet service had been dropping since 2015. This was undisputed. Nevertheless, PTA did not discuss this issue, but deliberately avoided it.

Homes in the Capital City Area had the option of fibre-optic of up to 1 Gb/s connection. So, it was clear that service was among the best in the world, and when one considers that prices had dropped, one couldn't come to any other conclusion than that there was very effective competition on the market. It was a mystery to Siminn how one could determine that competition was in place, if this was not a measure on which that should be based.

As proof that access barriers were not in place on the market, one could refer to the Nova entry where the company began to provide Internet service over fibre-optic in 2016. The company had thus provided such service for just over 3 years (as of end of year 2019). The company did not provide such service outside the GR area and was therefore not in competition in other areas. In 2017, Nova customers increased by just under 5000, in 2018 by 6500 (Nova acquired Símafélagið in 2018, which probably had an impact on the increase) and in 2019 by about 4000. Nova customers had in total thus increased by about 15,000 in 3 years. There is no information about development since the turn of the year 2019/2020. Given development during the past years, it was fairly clear that, Nova was still growing. As an example, Siminn had lost [...] in the GR operational territory and when one considers traditional increase in number of homes, it was likely that Nova was increasing its share. It was quite clear that there were no indications that Siminn was strengthening its position in the area. There was no likelihood that Siminn would exceed 40% share and it was thus out of the question that Siminn would achieve 50% share in the area."

It was also stated in the PTA statistics report that Nova had increased its customers in the area by over 2000 customers in the latter part of 2019. [...] There were, therefore, all indications that the Nova increase still continued. The PTA arbitrarily asserted on the other hand, that there was no effective competition on the market.

The position of the PTA

Siminn states that competition was effective in the Capital City Area, where it was established that the price for Internet service had been on the decline since the year 2015. The PTA reiterates that the conclusion of the PTA analysis of the relevant wholesale markets is that competitive conditions between areas where there is little or no competition on the one hand and areas where there is more competition on the other hand are not significantly different, to the extent that there is a reason to segment geographic markets in this country. The PTA however saw reason to apply varying obligations in these two sets of areas and the whole of the Capital city area (Reykjavík, Seltjarnarnes, Mosfellsbær, Kópavogur, Garðabær and Hafnarfjörður) is within an area where more competition pertains. The PTA cannot see how diminishing price for Internet service can justify segmented markets with respect to the Capital City Area, as the price of Internet service has declined equally across the whole country and is the same at retail level.

Siminn says that homes in the Capital City Area had the option of fibre-optic with up to 1 Gb/s connection. The PTA points out that the same can be said about a large number of other areas outside the Capital City Area, such as Akranes, Borgarnes, Reykjanesbær, Hveragerði, Ölfus, Árborg, Ísafjarðarbær, Blönduós, Skagaströnd, Sauðárkrókur, Ólafsfjörður, Dalvík, Akureyri, Húsavík and Egilsstaðir to a greater or lesser degree, and in addition to 6000 addresses in the country's most sparsely populated rural areas. There one can also find fibre-optic with 500 Mb/s up to 1 Gb/s connections. During the lifetime of the analysis one can expect more municipalities and urban kernels to gain access to fibre-optic. The Westman Islands, for example have now begun preparations for fibre-optic rollout in the town and Míla has now announced that the company intends to start deploying fibre local loops in the town in the year 2021. One cannot see therefore, that the Capital City Area is unique in this respect, to the extent that it would justify the particular segmentation of that area geographically.

Siminn indicates the Nova success in the Capital City Area. The PTA has here above discussed a similar comment related to Nova and refers to that. Siminn says that there are no indications that Siminn would strengthen its position in the Capital City Area. The PTA points out that in July 2020, Siminn made an agreement with GR on entry into the GR fibre-optic network. The PTA does not expect it to transpire otherwise than that Siminn will make gains in the customer group of Vodafone, Nova and Hringdu in the Capital City Area during the lifetime of the analysis in connection with this agreement. The Siminn position in the Capital City area or in the whole of the operational territory of GR, will in all likelihood be strengthened during the lifetime of the analysis because of this, all things being equal. Siminn will therefore most likely continue to have strong position on the retail market for Internet service at a national level, and as previously stated, the PTA does not consider there to be reason to segment the relevant retail market, nor the relevant wholesale markets geographically. However, the PTA considers it necessary to apply different obligations between areas with little or no competition on the one hand and areas with more competition on the other.

Siminn commented on the competitive conditions in the Tengir territory. It was the assessment of the company that access barriers were not in place in that area. It seemed that it was first and foremost Siminn and Vodafone that had operations in this area and there were

no reasons why Nova should not use the Tengir system and offer Internet service in the area in the same manner as in the Capital City Area. There were no indications to the contrary than that Nova could achieve comparable results in that area. Siminn had at least not seen any data or arguments that could lead to another conclusion. Nova had simply made a commercial decision, up to this point in time at least, to not offer fixed line service in that area.

Even though the Tengir operational territory was the second largest market area after the GR operational territory, the size of the area was nevertheless significantly smaller, which led to the market being able to move much more quickly. Nova had achieved about 17,000 customers in the Capital City Area over a period of 3 years. If Nova entered the market, Nova did not need to gain a particularly large number of customers to quickly achieve a significant market share. [...] This showed that Siminn could not be in a dominant position and particularly in the light of how easy it would be for Nova to connect to the Tengir system and offer fixed line service in North East Iceland.

In the opinion of Siminn, there was in reality one reason for Vodafone not having a higher market share than it had in fact in Akureyri, that the company had not served its customers well enough, see the recent marketing campaign where apologies have been offered to Vodafone customers for poor business practices. Vodafone offers comparable service to Siminn and it was therefore clear that the only reason for the difference in share was that Vodafone had been issuing incorrect invoices, overcharging customers that had, according to Vodafone lead to a loss of customers. If Vodafone succeeded in improving its image, it was not known what direction the company would take or whether Nova would take over.

With respect to Hringdu, that company did not have facilities in North Iceland and normally had limited priority for the area, unlike the Capital City Area. This explained the limited scope of the company's involvement in North Iceland.

The position of the PTA

The PTA disagrees with Siminn that there is reason to segment the Tengir operational territory geographically. Competitive conditions are not sufficiently homogeneous within this area. The PTA considers that there are entry barriers, no less than elsewhere in the country. Siminn generally has a very strong position in retail service in this area or with just over [...]% market share. The PTA however agrees with Siminn that Nova could make an entry in the Tengir operational territory during the lifetime of the analysis, particularly if [...] This alone though, does not make it obligatory to segment the Tengir operational territory geographically.

Siminn is concerned that the situation could change rapidly in the Tengir operational territory if Nova should start offering service in that area. The PTA points out that subsequent to the additional consultation that was opened on 30 October 2020, the Administration decided to update on an annual basis, the list of those municipalities belonging to areas with more competition, where lighter obligations would be in force. The PTA furthermore decided to increase the criterion with respect to Siminn market share in retail from 40% to 50%. The annual updating of the list would therefore capture all such fluctuations in a regular manner.

The PTA cannot see the Siminn purpose in trying to explain the significant reduction in Míla market share in this context. And how that should support the Siminn assertion that the Tengir operational territory should be a separate geographic market. The PTA is not prepared to

predict whether Vodafone will recover on the relevant retail market during the lifetime of the analysis, neither in the Tengir operational territory nor at national level. It is clear that the Siminn agreement with GR on the entry of Siminn into the GR fibre-optic network will not make it easier for Vodafone, nor for other Siminn competitors, in competition during the lifetime of the analysis.

With respect to the Siminn reference to Hringdu, the PTA considers it not inconceivable that company will place greater emphasis on service in the Tengir operational territory during the lifetime of the analysis, as applies to Nova as was explained here above.

Siminn discussed the competitive situation in other areas than the operational territories of GR and Tengir. It was the company's assessment that competition in other areas could be extremely varied, but one could point out that most urban areas outside this these areas had generally very few homes, compared with the Capital City Area and Akureyri. Exceptions to this would be municipalities where GR intended to deploy fibre-optic in the next 2-3 years, i.e., Árborg and Reykjanesbær. GR had commenced its projects in these municipalities, but they were at a relatively early stage where sales were only recently commenced.

In Reykjanesbær, competitive conditions differed significantly from other areas in the country for the reason that there was a company operating there, Kapalvæðing, and to the best of available information, the company had about 20% market share in retail, only when one took cable connections into account. According to the company's web page, it offers Internet service, both over fibre-optic and cable and the company's market share was therefore unclear. When GR and Míla fully implement their fibre-optic rollout in Reykjanesbær, there will be at least 3 companies operating their own systems. It was however unclear how large the Kapalvæðing system would be, but the PTA could well investigate that factor. On the company's website, it seemed that service was on offer to most homes in Reykjanesbær. In any event, it was Siminn's assessment that competitive conditions in this area differed from those in the Capital City Area. Kapalvæðing had operations and a significant market share in Reykjanesbær, but no operations in the Capital City Area and thus no share in the Capital City Area. Siminn considered that the company did not have SMP in this municipality. Siminn challenged the PTA to examine and analyse potential development in Reykjanesbær.

Other municipalities in the Reykjanes region were so small that a small change in customer numbers could have a significant impact on the situation, which meant that no company could have SMP under such circumstances.

With respect to Árborg it was established that GR had deployed fibre-optic to part of Selfoss, but no official information was available on when fibre-optic would be rolled out to Eyrabakki and Stokkseyri. When those projects were completed, then parties that use the GR system would begin to sell the service and over the next 2-3 years, development in the area would be quite different. In any event, parties had the choice of purchasing bitstream service from two parties, i.e., from Míla or GR. It was Siminn's opinion that there was effective competition in the area and that entry barriers were small. Entry barriers would be further lowered when GR completed fibre-optic rollout in the area.

With respect to other municipalities in South Iceland, i.e., from Árborg and east to Höfn, which was in East Iceland, there were a few urban kernels that had xDSL systems, but the

rural areas had had fibre-optic deployed to a significant extent. The development had been under the aegis of GR, Míla and of the municipalities themselves. Siminn considered it difficult to find a homogeneous picture of the area as the underlying infrastructures were many, and differences between areas could be significant. In this way, there was a difference between Hella and Hvolsvöllur on the one hand, and the surrounding rural areas on the other. On the whole, this was an area that needed to be analysed in detail in order to determine the competitive situation and why some companies did not offer their services in the relevant area. In the opinion of Siminn, the idea appeared to be that few companies showed an interest in offering service in rural areas. On the whole, there has been significant fibre-optic rollout and it was necessary to analyse which areas remained for fibre-optic to be deployed and to react by encouraging such fibre-optic rollout and then to facilitate access to the relevant areas. The planned PTA, obligations worked in the opposite direction.

East Iceland is something of an exception to the other areas where fibre-optic rollout has lagged far behind. Few municipalities have deployed fibre-optic systems compared with other regions. [...] In the opinion of Siminn, the key issue in development of electronic communications in East Iceland was to encourage development by parties and the private sector, by creating positive conditions for them. This would for example be possible by encouraging parties, alone or in cooperation with others, to deploy fibre-optic and thus decommission the xDSL system, which was still in the vast majority of cases in the area. Conditions for fibre-optic rollout on commercial terms in East Iceland were extremely demanding and it was therefore clear that if conditions or grounds for recovering investments were difficult or unlikely, there was a risk that the region would fall even further behind. Siminn has significant concerns that the PTA plans for single price for Míla would lead to Míla not seeing an advantage in embarking on such a project in the area. Siminn considered that PTA obligations would lead to the situation in East Iceland remaining unchanged.

Siminn considered that the prerequisite for increasing competition in East Iceland was to speed up or encourage fibre-optic rollout. It was an obvious fact that for companies that emphasised fibre-optic service, they would not start to invest in xDSL equipment or deployment for small areas which would provide insignificant results, and which was known would at some point in time be replaced. Operations would thus not commence on the market until fibre-optic was on offer. The PTA had for example not estimated whether Nova or any other electronic communications company could enter the area with 5G service and thus resolve the need for faster service than that which was on offer today.

The remaining region was the area from GR operational territory in West Iceland to the Tengir territory in North Iceland, i.e., the north-west corner of Iceland (Snæfellsnes, West Fjords and North East Iceland). As in South Iceland this was an area with differing development and infrastructure and very varied between areas. On the whole, in the opinion of Siminn, there was a need to identify where fibre-optic had been developed and where not. Where only an xDSL system was available, measures needed to be examined with respect to encouraging deployment of fibre-optic and to encourage parties to offer bitstream service in order that more parties could offer service. The same can be said about East Iceland, which was an extremely expansive area with a small number of inhabitants and a high proportion of single dwelling units in each urban kernel. The fact was that parties' interest to offer service in the areas was often limited and regardless of what obligations were imposed with respect to access to bitstream service or local loops, that did not change these challenges.

On the whole, competitive conditions outside the territories of Tengir and GR differed greatly, and it was difficult to define which market applied. In the opinion of Siminn, one had to take into account the measures required for there to be a likelihood that fibre-optic would be deployed where it had not previously been deployed, and the measures needed to be adopted for the purpose of increasing parties' interest in offering service in the relevant areas. The policy of the Althingi was that fibre-optic should be deployed as widely as possible and the PTA should pay attention to that policy. It was perfectly clear that given development in the Capital City Area, the Siminn service offer was not the problem as maintained by the PTA, on the contrary, the challenges lay elsewhere. It was simply because of the fact that there was a sufficient number of customers that one could acquire in the Capital City Area, that parties prioritised their market operations on this market, where expected revenue was highest.

In the opinion of Siminn, the interest of parties would increase if fibre-optic was offered in 99.9% of cases, such as the Althingi has emphasised, and the PTA should endeavour to go in this direction, as such a policy harmonised with the objectives of the Electronic Communications Act.

The position of the PTA

The PTA does not agree that competition in other areas than the operational territory of GR and Tengir are significantly different at retail level. Nor does the PTA agree that competitive conditions differ significantly at retail level across the country. Consumers, regardless of where they are located in the country, generally do not experience varying prices, product offer, service characteristics or quality to any significant degree. It is however clear that deployment of fibre-optic does not yet have national coverage, but nevertheless it is relatively high, and fibre-optic rollout will continue under full steam during the lifetime of the analysis. There is furthermore some difference in Siminn retail share in the various areas, but nowhere is it significantly low. The PTA captures this variety in the criteria applied by the Administration when choosing areas for closer analysis and has aggregated those municipalities where fibre-optic rollout of Míla competitors is high and the Siminn retail share is under 50% and applies lighter obligations in those areas. Competitive conditions do however not differ between areas to such a degree that would justify segmented geographic markets.

The PTA does not consider there to be reason to answer particularly here, the above specified Siminn deliberations on competitive conditions in the various areas and refers to prior answers on this subject. The PTA does however reiterate, because of the Siminn assertion relating to cost oriented tariff on Míla fibre-optic that was notified in the preliminary assessment, that the PTA has retracted this obligation for the time being, among other things because of considerations that it could delay deployment of fibre-optic networks in the countryside The PTA intends instead to apply an ERT obligation, which affords the Siminn Group greater latitude with respect to pricing and should thus encourage Míla in continued deployment of fibre-optic networks.

6.5 Assessment of homogeneity in competitive conditions in selected areas

6.5.1 General

Míla refers to paragraph 485 where it stated that in forward looking geographic analysis it could come to light that infrastructure competition on Market 3a was inadequate, as sufficient number of network operators was not in place. This particularly applied if barriers to entry were also significant. Incentives for damaging collusion would increase as the number of network operators was lower. Under such circumstances, a lack of wholesale obligations could lead to a lack of effective competition on corresponding retail markets to the detriment of consumers. In order for efficient competition to be deemed to be in place, BEREC had in its common position from 2014 generally considered that there needed to be electronic communication networks of more than one competitor to the potential SMP operator. The same could be said about other NRAs in Europe.

Míla said that the PTA had not made an adequate analysis which was forward-looking, and which examined, for example whether there was a potential joint dominance situation. It was clear that GR had SMP on the market for fibre-optic in its operational territories.

The position of the PTA

The PTA refers to detailed arguments for its decision that there is still substitutability between copper and fibre-optic networks and that there is no reason to segment geographic markets in this country, but rather to apply varying obligations by area. This means that GR operational territory is not examined separately, but rather the whole country as one geographic market. Míla has a very strong position there with market share of 57% on both Markets 3a and 3b at the end of 2020. As previously stated, the PTA does not expect that Míla market share will diminish significantly during the lifetime of the analysis and that it will in all likelihood exceed 50% on both markets at the end of the lifetime of the analysis. Given the above premises, there was no reason to embark on complex and time-consuming assessment of potential joint dominance of GR and Míla.

Siminn pointed out that the PTA had neglected to investigate demand-side substitutability in connection with geographic analysis, despite the fact that the Administration generally referred to this as being a very important factor. The PTA considered that it was not sufficient to maintain on the basis of information from web pages of electronic communications companies that the same price was on offer and thus the conclusion was drawn that this was one and the same market area. This was clearly incorrect and Siminn pointed out that the PTA used criteria that had been rejected, see the EU Commission Decision in the case in Sweden no. SE-2019-2216, where it says, among other things:

"BEREC observes that there is very limited direct competition in Sweden between fibre network operators on the market for wholesale local access to fibre networks, however, the market analysis of PTS does not elaborate on this point. BEREC further considers that there is no sufficient evidence of direct constraints and no evidence of indirect constraints to define the market as national in scope.

As regards PTS' argument that Telia's nationally uniform pricing is a sign of national market, BEREC considers that this argument (alone) is insufficient to define the Swedish market for wholesale local access to fibre networks as a national market."

Then Siminn also indicated a news item from the Commission where definition of geographic markets had been discussed:

"The Swedish fibre access market is fragmented with a multitude of fibre network operators. The traditional telecoms incumbent Telia has the largest fibre network, with a share of under 40% of all fibre connections. Over 60% of the fibre connections link to municipal networks. Networks owned by municipalities focus on connecting homes within their respective geographic boundaries. Thus, they tend to have very high market shares in their municipality and usually no presence beyond it.

Typically, fibre networks in Sweden do not overlap geographically; only limited numbers of larger apartment buildings are connected to more than one network. Prices for wholesale access are often different across the country, depending on the provider and other conditions such as density. There is no evidence of either demand or supply substitutability between operators.

For these reasons, the Commission considers that competitive conditions are not sufficiently homogeneous across the entire country to conclude on one national market."

When one considers Iceland, it was clear that the same situation existed in this country. Tengir owned 40% in Norðurorka, which was owned by municipalities in North East Iceland, and which offered fibre-optic service in the operational territory of its owners. The same applied to GR, i.e., those areas where the company had 100% distribution. GR had actually gone beyond its owners' territory, but only in neighbouring municipalities, and did not offer service in competition with Tengir.

The easiest way to analyse the relevant market area was to identify the possibilities facing electronic communications companies if the price of a specific company would increase by 5-10%. If the point of departure was Mila, then there would be varying possibilities by area. In the GR territory, companies could purchase service from GR in the Tengir territory, companies could move service to Tengir, but outside that there was no option for wireless solutions. This shows clearly that competitive conditions between these areas were not homogeneous.

If one considered consumer, one could consider what would happen if an electronic communications company should pass on the Míla cost increase directly into the pricing. In such a situation, the consumers would have comparable options, and electronic communications companies. In addition to this, the emphases of electronic communications companies differed by market area, i.e., Nova did not offer Internet service through a fixed line connection outside the GR territory, but widely marketed Internet service through mobile networks (4G and 5G).

The position of the PTA

The PTA has here above replied to comments on alleged lack of assessment of supply-side substitutability in geographic analysis and refers to this and to the discussion in the revised preliminary draft (Appendix A).

Siminn is not correct in saying that the PTA bases its conclusion that there is no reason to segment geographic markets in this country, only on the same price being on offer with

electronic communication companies across the country. The PTA bases that conclusion on a comprehensive assessment of a large number of factors that were investigated, see Sections 6.6 and 7.6 in the preliminary assessment (now the same sections in Appendix A). Reference is made to this and to the PTA reply to comments from Siminn and Míla here in the continued discussion.

Siminn makes reference to the case from Sweden from 2019 on Market 3a. The circumstances in this country and in Sweden are totally different on the relevant market. It was the assessment of the PTS that in that country there was no longer substitutability between copper networks and fibre-optic networks. It should be noted that in Sweden there are generally only ADSL copper networks and not VDSL to any extent. That is why copper networks in Sweden have much less capacity than the Míla copper network in this country. Then the situation in Sweden does generally not pertain where fibre-optic networks are deployed in parallel, which means that there is very little overlap. Under such circumstances, by the nature of things, there is more likelihood that there will be a need to prescribe geographic segmentation than in this country. The PTA reminds however that the PTS retracted the analysis in question and work is now being done on amending the analysis.

In this country there are widely examples of parallel fibre-optic local loops, see for example up to 70% of the Capital City Area, but also in Arborg, in Reykjanesbær, widely in the Tengir operational territory in North Iceland, in the Snerpa operational territory in the West Fjords and in the operational territory of Austurljós in East Iceland, which is now deploying a fibreoptic network at Egilsstaðir. In addition to this there is a large number of parallel local loop networks in place, if one includes the Míla copper network in the equation, as is reasonable to do as this is a case of a substitute, when one considers the very numerous fibre-optic networks owned by municipalities at a wide range of locations in the country's rural areas. The PTA expects this development to continue throughout the lifetime of the analysis, among other things because Míla plans to continue to invest vigorously in fibre-optic rollout, and because of the plans of GR, Tengir, Snerpa and Austurljós, that are however more modest than the Míla plans. Because of the fibre-optic development of parties other than Míla, which reached about [...]% of homes and companies at the end of 2020 and is expected to reach about [...]% at the end of 2023, there is some competitive restraint at locations in many places in the country, and it will in all likelihood move to more areas during the lifetime of the analysis. This indicates that geographic markets should not be segmented on the relevant markets in this country.

In addition, Siminn noted that the emphases of electronic communications companies differed by market area, i.e., Nova did not offer Internet service through a fixed line connection outside the GR territory but widely marketed Internet service through mobile networks (4G and 5G).

In a Nova reply, dated 22 October 2020, to a query from the PTA dated 6 October last year, it, among other things, was stated that the [...].

Then it was stated by Mila that there were plans for [...].

It was clear that Nova had plans to offer fixed network service at more locations than the country did today, during the lifetime of the analysis. This means that is not unlikely that Nova [...]. There is greater uncertainty about distribution of 5G networks during the lifetime

of the analysis and its potential impact on competitive conditions on the relevant wholesale markets and related retail market.

Siminn said that when assessing supply substitutability, with respect to geographic demarcation, one took into account how quickly a company operating in a specific area could change or move its production in the event of a 5-10% price rise. In short, it was clear that a company that offered fibre-optic service was not likely to move its service into a new area in order to react to changes in demand, subsequent to a 5-10% price rise. Tengir was thus unlikely to enter the whole of the GR territory sufficiently quickly, if GR raised its prices by about 5-10% or vice versa. Siminn pointed out that a price rise only needed to be notified with 30 days' notice, but the planning and deploying of fibre-optic connections took a considerably longer period of time.

This confirmed that on the basis of supply-side substitutability, there were separate markets by territory of Tengir and GR and by other areas. Here it would for example have been important to assess the significance of 4G or 5G service and whether a price rise in xDSL service would lead to a mobile phone company subsequently starting to offer 4G or 5G service in the area. The nature of Internet service over mobile phone systems was as before, local and demarcated by the area sufficiently close to the transmitter in question in order to achieve adequate quality.

The position of the PTA

The PTA refers to the detailed answer here above on supply-side substitutability and the problems with the SSNIP test when making geographic analysis. Reference is made to this. With respect to potential substitutability of mobile networks for fixed line networks, reference is also made to the PTA detailed reply here above in Sections 3 and 4 and to the same sections in the revised preliminary draft (Appendix A).

6.5.2 Access barriers by area

Míla referred to paragraph 488, where it was stated that one could assume that in this country access barriers were more common in sparsely populated and more widespread areas than in more densely populated areas, as had been manifested with the rollout of the GR fibre-optic network in the Capital City Area and that of Tengir in Akureyri and widely in North Iceland. In those areas there had been players that competed with the former monopolist incumbent. Gagnaveita Skagafjarðar had been founded in Sauðárkrókur on the initiative of utility companies in the region, but it had proved not to have a basis for operating as an independent unit and was therefore sold to Míla late in 2013 when it provided service to about 650 households and 80 companies.

Míla said that here, "providing service" was being confused with customers having the option of service. When Míla took over, about 400 homes and about 40-50 companies had active service on the Gagnaveita Skagafjarðar (GVS) system. Despite the fact that this system had been relatively large, it had nevertheless been too small to have an operational basis and revenue from operations that did not even cover operational costs. GVS experience had been

that as soon as a company intended to offer bitstream, then it needed to have achieved a specific size. This was probably one of the reasons that other municipalities had not seen the advantage of choosing the same route.

The position of the PTA

The PTA cannot see that this Mila comment does not harmonise with paragraph 488 in the preliminary draft. This means that it will not result in amendments to the paragraph in question in any respects other than that the PTA will correct these numbers.

Míla refers to paragraph 490 where it is stated that access to economic trunk line connections for the service that access networks needed to connect to service providers, mostly operated a central system from the Capital City Area, are also quite important in this connection. Another factor was that potential customers were fewer than in the Capital City Area and thus had to support higher costs for trunk line connections than was the case there.

Míla stated that there were 3 parties that operated IP transit networks that were a prerequisite for service for access networks in the countryside, not the trunk line connections themselves. They were the equivalent of fibre-optic that everyone had access to on a basis of parity, and in addition to this there were more than Míla who had trunk line fibre-optic around the country. Míla did not operate an IP transit network with national coverage. This was therefore not an access barrier to development of access network.

The position of the PTA

The PTA pointed out that market analysis for trunk line lease has now commenced at the PTA and that the decision currently in force is from 2015. The PTA also came to the conclusion that Míla had SMP on that market and that there were significant barriers to entry. From that time, trunk line networks had certainly been deployed by parties other than Míla at various locations around the country. The PTA however stands by its assertion in paragraph 490 in the preliminary draft to the effect that access to efficient trunk line connections were very important for the development of Markets 3a and 3b and that potential customers were fewer in the countryside than in the Capital City Area and needed to support higher costs for trunk line connections than customers in the Capital City Area.

With respect to the Míla reference to IP transit networks and that Míla did not operate such a network, it should be noted that from the turn of the year 2020/2021, Míla operated an IP-MPLS transit network that was owned by Siminn, see the above specified agreement between Siminn and Míla on the transfer of specific assets from Siminn to Míla. It is clear that no other electronic communications company in this country operates an IP transit network with national coverage, or such a network that was close to being as powerful as the Míla network in question.

Míla referred to paragraph 492, where it is stated that in 2021 6000 fibre-optic connections would have been deployed in the most sparsely populated parts of this country with the support of the Telecommunications Fund and in addition to this, a number of municipalities would have embarked on such deployment without public funding. Míla has variously

purchased such networks or leased them recently and continued developments in this direction were expected. Míla furthermore offered bitstream service on those local networks that the company has not purchased or leased (with the exception of the GR network). Given the declared distribution of players such as GR, Tengir and Snerpa, the fibre-optic networks operated by Míla competitors would reach about 90% of households in the country during the lifetime of the analysis.

Míla stated that GR had notified intentions for a fibre-optic network with national coverage in 2025.

The position of the PTA

Given the newest GR distribution projection, it is clear that the company will not have a fibre-optic network with national coverage at the end of the lifetime of this analysis. One can expect that the GR distribution will reach about [...]% of homes and companies at the end of 2023 on Market 3a, assuming that the number of spaces increases by 3,000 per year due to new construction, etc. At the end of 2020, this proportion was 67% at GR. In other respects, reference is made to the detailed reply on this issue in Section 6.2 here above.

6.5.3 Number of significant competitors by area

Míla refers to paragraph 498, where it is stated that it was very unlikely that consumers and companies in this country would have access to more than two options for access networks provided at a fixed location and that one could assume that in many areas in the countryside it was unlikely that there would be more than one. Míla had requested the withdrawal of the universal services obligation, as fibre-optic networks under the auspices of municipalities had taken over the service provided by copper network with the very substantial increase in service possibilities that fibre has over copper. The PTA however reiterated that Míla had been purchasing or leasing many of these local networks at many locations in the country and it was likely that this development would continue throughout the lifetime of this analysis. Míla provided bitstream service on almost all of the local networks where this had not happened (except on the GR network).

Míla pointed out that although Míla had purchased a number of local loop networks owned by municipalities, they were usually very small and only had possibly a few tens of local loops in each instance. These few local loops have therefore little significance in the context of the number that were in the south-west corner of the country and in Akureyri. These purchases had little significance in the bigger picture. Nor was it correct that Míla had access to all the fibre-optic systems in the country, apart from GR. Míla, for example was not in the Líf í Mýrdal fibre-optic network or in the fibre-optic network that served Fljótsdalshreppur. There was also the fact that Míla was not on the Snerpa network to any significant degree today. The company had only access to about 15-20 homes in the rural area in Dýrafjörður but was conducting negotiations with Snerpa about access to the company's network against an additional fee.

The position of the PTA

The PTA agrees with Míla that these local countryside networks were often very small and had little significance in the big picture. Though Míla could name two small networks of many tens, where the company did not have access, Míla considers this not to be sufficient reason to change the assertion that Míla provided bitstream service on almost all of the small networks. The same can be said about Snerpa in the West Fjords, where Míla states that its presence there is very small today but that it is conducting negotiations with that company on access, and one must consider it likely that an agreement will be reached as the Snerpa network gradually extends.

Míla referred to paragraph 499 where it is stated that Siminn planned to decommission the PSTN digital telephone service as voice telephony using the IP protocol is replacing it and Míla has declared its intention to decommission the copper system in phases during the coming years, where the first phases are within two years and the last phases after about a decade or so. These Míla plans would therefore not have a significant impact during the lifetime of this analysis.

Míla considered it clear that the decommissioning of copper would have a significant impact during the lifetime of the analysis and that this had to be taken into account.

The position of the PTA

The PTA stands by its assertion that the Míla plan for decommissioning the copper system during the next 10 years will not have a significant impact on the relevant wholesale markets during the lifetime of the analysis. Subsequent to PTA opening consultation on 30 April 2020, Míla had formally notified about these plans. Reference is made to the discussion on this issue here above and the PTA will revise the above specified paragraph 499, in accordance with this in Appendix A.

Míla referred to paragraph 500, where it is stated that it would be fairly certain that deployment of fibre-optic would take over the vast majority of the copper connections that Míla would decommission, if not all, but it was not inconceivable that wireless connections could replace some of these copper connections. The roll-out of fibre-optic connections through the project, Iceland Digital Connected, made it unlikely that there would be business opportunities in that sector.

In the opinion of Míla, published press releases from Nova and the Westman Islands municipality indicated that parties to the market did not agree with this PTA conclusion.

The position of the PTA

The Althingi endorsed, with its parliamentary resolution in 2019, the government policy in electronic communications, on the one hand for the years 2019-2023 and on the other hand, for the years 2019-2033. The 5-year plan allows for 95% of legal abodes and companies in the country having access to fibre-optic connections. The longer plan prescribes that this proportion will be 99.9%, no later than 2033. At the end of 2020 this proportion reached 83%.

It is therefore clear that, according to the policy of the Icelandic government, they do not consider that wireless solutions will replace fixed line solutions. If fibre-optic reaches 90-95% of legal abode and companies at the end of 2023, there will be 5-10% remaining. According to new Mila plans for decommissioning the copper system, this closure will over the next 5 years only come into effect at locations where fibre-optic rollout has commenced, is at an advanced stage or is completed. This applies to all of the Icelandic rural areas (Iceland Digital Connected), the Capital City Area and to all urban kernels to which the above description applies. It would not be until after 7-10 years that the remainder of the copper system would be closed. That would be in those areas where fibre-optic rollout was at a very early stage.

According to the above, it is clear that in the lifetime of this analysis, Míla will not close its copper networks to any great extent in areas where fibre-optic is not been deployed. The PTA considers that mobile network solutions, including 5G, will rather be an addition to fixed line networks rather than substitute, but one may expect that a small proportion of homes/companies will settle for mobile network solutions. Mila refers to Nova and Westman Islands and the PTA requested information from Nova relating to this. In a reply from Nova, dated 22 October 2020, it was stated that on 1 October 2020 there had been [...] active mobile connections from that company in the Westman Islands that could replace home connections through a fixed line network, and they had been [...] at the beginning of that year. The PTA had no information about whether the homes/companies in question also had fixed line connections, and this is not inconceivable. It should be noted that Nova commenced 5G service in that municipality in the spring of 2020. This would be about [...]% of homes/companies in the Westman Islands. And a council meeting in the Westman Islands on 3 December 2020, it was decided to allocate significant funds in the year 2021 to deploy fibreoptic in the town. This indicates that the local authorities in the Westman Islands did not consider mobile network solutions to be a substitute for fibre-optic network (FTTH). Mila has also recently announced that the company intends to start fibre roll-out in the town in the year 2021.

The PTA requested information from three mobile phone companies in September 2020 on their development plans with respect to 5G. The PTA referred to the fact that the companies had been allocated frequency ranges for 5G in April 2020 and that the period of validity was until 31 December 2021. No specific requirements had been made on deployment of networks and distribution of service. On the other hand, specific incentives had been elaborated for development and distribution of service. On the one hand, the assumption was that general distribution would be achieved to 25% of the population and on the other hand a specific distribution service in specific urban kernels.

In a reply from Nova, dated 1 October 2020, it was stated that Nova had already fulfilled the specific requirement, i.e., by deploying 5G connections in Hella, Sandgerði and the Westman Islands. It was expected that 40 transmitters would be set up in the year 2021 to fulfil the general distribution obligation, i.e., that the service reached 25% of the population. There were no plans available for distribution for specific areas, for example in urban kernels and in the countryside. The pandemic had distorted plans and slowed down development and had created uncertainty about plans and emphases. It was hoped that in the coming months, the plans would be clearer on geographic areas and development of 5G service. Then it was stated in a reply from Nova, dated 22 October 2020, that there was significant uncertainty now about

the above specified information as the authorities had indicated that limitations would be imposed on the use of 5G equipment from a specific manufacturer that the company had used.

In a reply from Vodafone, dated 5 October 2020, it was stated that there was considerable uncertainty about 5G issues with that company and that various factors could have an impact on the speed and nature of this development. There were no available plans. The only thing available was that the company would fulfil the above specified PTA requirements according to the frequency allocation. The distribution would hopefully be more than the requirements, at least in the Capital City Area.

In a reply from Siminn, dated 1 October 2020, it was stated that the company would meet all requirements of the frequency allocation, i.e., to have developed 5G service which reached at least 25% of the population and to provide 5G service at Blönduós, Þorlákshöfn and Egilsstaðir. Siminn would fulfil the 25% distribution requirement at least with development in the Capital City Area and in Akureyri. As 5G technology and related equipment was relatively new and expensive, Siminn would wait with decisions on further development until the conditions of permanent frequency allocations and the status of 5G technology in Europe became clearer.

With the above in mind, it is clear that it is extremely difficult for mobile phone operators in this country to predict development of distribution and take-up of service on 5G systems. It is therefore no less difficult for the PTA to predict likely development in this respect during the lifetime of the analysis. The PTA keeps to its conclusion that is not likely that 5G service, or another mobile phone service, will have a significant impact on the development of the relevant wholesale markets during the life of the analysis. If there are significant deviations from this prediction, the PTA will commence a new analysis without delay.

Míla referred to paragraph 501, where it was stated that widely outside the Capital City Area and larger urban clusters, one should consider it unlikely that two, and even less likely three companies would deploy fibre-optic to households and companies. It was likely that in the more dispersed regions and in smaller urban clusters, there would only be one choice. In the same way one would have to say that the possibility of third-party entering the market at those locations where there are already two network operators was negligible and unrealistic. Míla seemed to be systematically guaranteeing access for itself to the municipality networks in question, either by purchasing them, leasing them long term, taking over their operations or at the very least providing its GPON bitstream service through them. Taking into account future outlook of decommissioning of the copper system, it was clear that Míla was actively endeavouring to assure its future position as a nationwide network operator.

Míla considered that it was correctly assessed that there would widely be only one network operator, as most of the areas that remained to have fibre-optic deployment could hardly support one network operator, certainly not more than one. Míla was under significant pressure from such areas (both from municipalities and individuals) to provide bitstream service, even though it was clear that such development would not pay. Míla objected to the PTA casting suspicion on such development. The conclusion of the draft market analysis indicated that the PTA wished that parties other than Míla provided service. Míla would therefore review its plans to operate access networks across the whole country.

The position of the PTA

The PTA rejects that it casts suspicion on the Míla fibre-optic network development in the countryside and that the PTA particularly wished that parties other than Míla provided their service there, by saying that Míla had actively endeavoured to assure its future position as a network operator across the whole country, among other things by purchase or long-term leasing of small countryside networks or the deployment of such networks with state aid. In the above specified paragraph in the preliminary draft, the PTA said that it could be unrealistic for smaller communities or widely distributed populations to support more than one fibre-optic network. The PTA considers it important that fibre-optic networks be developed in as many locations as possible, whether this is in the hands of Míla or of other electronic communications companies. Among other things, the PTA decided subsequent to the additional consultation to withdraw its intention to impose an obligation for cost analysed prices on Míla fibre-optic and to prescribe instead an ERT obligation, which gave the Siminn Group greater latitude for development of fibre-optic networks and pricing.

Míla referred to paragraph 502 where it was stated that it was mainly GR in South West Iceland and Tengir in North Iceland that could be considered significant competitors to Míla on the market in question.

Míla considered that Snerpa in the West Fjords should be categorised as a significant competitor. It was in fact foreseeable that in some areas, Snerpa would be the only network operator. The same applied to Kapalvæðing at Reykjanes.

The position of the PTA

The PTA disagrees that Snerpa, on the basis of current number of fibre-optic connections and plans for development during the lifetime of the analysis, could be considered a significant competitor when one considers the whole picture. The Snerpa market share was negligible in a national context. Snerpa had deployed fibre-optic to buildings in its operational territory in the West Fjords, to about 42% of connectable addresses or to 1,177 households and companies at the end of 2020. Snerpa is most advanced in its fibre-optic distribution in Ísafjörður, where the network reached about 52% of homes and companies at end of year 2020. Míla has already deployed fibre-optic networks in the West Fjords, see in Súðavík. In October 2020, Míla could not submit a distribution plan to end of year 2023 to the PTA, where the plan was broken down by municipality. In fact, Míla could not even provide the PTA with such information for the year 2021, certainly not for longer into the future. At the end of April 2021, the PTA had not yet received this information from Míla, despite repeated inquiries. It is not inconceivable that Míla development in the West Fjords will continue during the lifetime of the analysis. The roll-out plans Mila finally provided to PTA on the 15th of June 2021 support the projections of the PTA made above.

The PTA rejects that Kapalvæðing, which operates a rather small cable system in Reykjanesbær and even smaller FTTH network, could be considered a significant competitor when considering the whole picture. The PTA has come to the conclusion that such a cable system did not provide a substitute for copper networks and fibre-optic networks on Market 3a and therefore did not belong to that market. According to information from Kapalvæðing,

the company will not extend the distribution of its cable system from what it is today. Kapalvæðing has also made an agreement on entering the GR fibre-optic network and will therefore operate at retail level over the whole of the GR operational territory, as that is at any given time.

6.5.4 Market share in wholesale and retail by area

Míla states that market conditions are not homogeneous across the whole country. Significant changes have taken place, with increased fibre-optic rollout across the country since the PTA Decision no. 21/2014 was made. The situation was such that there was no substitutability between copper and fibre-optic. The Míla copper network with national coverage did not in reality have significance for geographic definition of markets for fibre-optic networks on Markets 3a and 3b, unlike the situation that may have pertained at the time when the previously referenced decision was made. The Míla position had furthermore weakened significantly from this time, as the market for service over copper was a declining market. It was also foreseeable that the Míla position would continue to weaken in copper during the lifetime of the analysis, because of this. At the same time there had been significant growth in service over fibre-optic with increased competition between a variety of fibre-optic networks in specific areas.

The position of the PTA

The PTA did not say that competitive conditions were precisely the same across the whole country. The PTA has however come to the conclusion that they are not so significantly different between municipalities that belong to the group of areas with little or no competition on the one hand and a group of municipalities within areas where more competition pertains on the other hand, to justify segmenting these areas geographically. There is only reason to prescribe lighter obligations in those areas where more competition pertains.

It is true that fibre-optic deployment has increased significantly from the last analysis. Companies like GR and Tengir have increased their distribution, Snerpa has commenced fibre-optic rollout in the West Fjords, as has Austurljós in Egilsstaðir in East Iceland. What has however changed most, is that Míla has greatly increased its fibre-optic distribution during the period. In the year 2014 Míla fibre-optic rollout had hardly started, while at the end of 2020, Mila had deployed fibre-optic to at least 77,000 spaces, but as previously stated, the PTA considers this to be underestimated and that the number could be close to 90,000. The investor presentation of Siminn Group for Q2 2021 from 31. August 2021 it is stated that Mila's network now reaches 100.000 homes. Given information from Mila on investment in fibre-optic rollout in the coming years, it is clear that Mila will continue to vigorously invest in such distribution, while the distribution plans of GR, Tengir, Snerpa and Austurljós are much more modest. For this reason, the PTA believes it to be axiomatic that there is every likelihood that there will be a significant levelling of the number of fibre-optic connections of Mila on the one hand and of the other four parties on the other during the lifetime of the analysis. At the same time, Míla has a copper local loop network that virtually has national coverage that Míla has however plans to decommission little by little over the next 10 years, at the same time as fibre-optic deployment will continue to be vigorous.

Míla says that the position is such that substitutability no longer exists between copper and fibre-optic. The PTA does not agree with this, and refers to the detailed arguments on this issue in Sections 3 and 4 here above, and in the same sections in the revised PTA preliminary assessment (now Appendix A) as well as in Appendix C. The PTA does not agree with Míla that the Míla copper network with national coverage does not matter in geographic definition of the relevant wholesale markets. Though the development will without doubt continue during the lifetime of the analysis that active copper connections will decrease at the cost of fibre-optic connections, the PTA considers it unclear whether this will be reflected in a significant decrease of Míla market share on the relevant wholesale markets. The vigorous Míla fibre-optic rollout in past years is a factor here, and also the company's ambitious plans for continuing fibre-optic rollout.

Though the Míla market share has decreased somewhat since the last analysis, it was still extremely high at end of year 2019, i.e., 57% both on Market 3a and 3b. As stated above, the PTA does not expect that the company will drop below 50% in the lifetime of the analysis on the relevant markets.

Míla refers to paragraph 503, where it is stated that one method of including the size and strength of competitors by area when conducting geographic analysis, was to examine the market share of market players in specific areas. One must keep in mind that at this stage in the case, these were not real market shares, as the final delineation of geographic markets is not yet concluded. It would be ideal if not only market share at a given point in time were shown, but also its development over time in order to make it possible to identify certain trends in this connection. In this context, two points in time could often suffice. Should there be indications of significant changes in market share through points in time, then this could be an indication of varying competitive conditions by area.

Míla pointed out that the PTA had not followed the guidelines prescribed here, i.e., that no attempt had been made to make a projection on future development of the market.

The position of the PTA

The PTA endeavoured to predict development of market share on the relevant wholesale markets and related retail market in its preliminary assessment. However, it can be difficult to make accurate predictions. Subsequent to consultation on the preliminary draft, the PTA called for more detailed data and information from electronic communications companies, and in addition to this, various developments had taken place since the preliminary assessment was submitted for consultation. The PTA will endeavour, in the revised draft market analysis (Appendix A), to present more reliable predictions on probable development during the lifetime of the analysis.

Siminn for example has now come to an agreement with GR on bitstream access to the GR fibre-optic network, see agreement on this issue from July 2020. At the end of 2020, Siminn market share was 46.3% and it was 47.9% at end of year 2016. The Siminn market share has thus changed very little in recent years, while the market share of the next largest party, Vodafone, has for example decreased from 37.1% at end of year 2017 to 27,7% in at the end of 2020. In competition law, one needs to take such differences into account. The Siminn

position has therefore not been weakening to any significant degree in recent years. Among other things, because of the above specified agreement between Siminn and GR, it is likely that the Siminn position will strengthen somewhat during the lifetime of the analysis, all things being equal. It is not unlikely that Siminn will have more than 50% market share on the retail market at the end of the lifetime of the analysis.

At the end of 2020, the Míla market share on Markets 3a and 3b was 57% and had decreased somewhat on both markets from end of year 2013, i.e., from 83% on the former market and from 65% on the latter market. The weakening had however only been in the order of a number of percentage points per annum on market 3a and even less on market 3b. The PTA considers that the Mila market share will decrease somewhat during the lifetime of this analysis but considers every likelihood that at the end of the lifetime of the analysis, it will be over 50% on both markets. In this context, it is taken into account that a number of Siminn customers will move from the Míla systems to the GR system, though Siminn will without doubt also gain a significant number of customers of its competitors that are already on the GR system. The Míla decommissioning of the copper network could furthermore have a small impact, but as has previously been stated, the PTA considers that the greatest effort in this decommissioning will be subsequent to the end of the lifetime of this analysis. The significant effort that Míla has put into fibre-optic deployment in the past years, and its plans for continued vigorous fibre-optic rollout by the company in the coming years, will without doubt, mitigate the negative impact of this for Míla. It is also possible that companies such as Vodafone and Hringdu, which have been more on GR's fibre network than Míla, will increasingly move to Mila during the lifetime of the analysis.

In its preliminary draft, the PTA discussed market share in specific areas, but as the PTA has come to the conclusion that there is no reason to segment the relevant wholesale markets in this country geographically, the PTA considers no reason to discuss in detail market share in individual areas, but the PTA has such data at hand and has analysed them.

Míla refers to paragraph 505 where it is stated that the PTA had collected data on the retail and wholesale market for connections with a fixed usage location, where the data had been divided by municipality at the points in time, i.e., 01 July 2018, 1 January 2019 and 1 June 2019. The figures for the status on 1 January 2020 were expected. Data had been collected on retail share in Internet service and deployment of networks, both networks owned by Míla and by others, and also on the adoption of service on each network. Data had been collected on the number of customers in each municipality and on the network through which the service was provided.

Míla said that, according to guidelines on conducting market analyses it was not enough to look to the past in such analysis. Míla considered it to be an absolute condition that the PTA made a prediction on future development and took particularly into account the planned decommissioning of voice telephony, that had a significant impact on the calculation of market share.

The position of the PTA

As stated in paragraph 505 in the preliminary draft, the PTA collected data on distribution of electronic communications networks and market share on the relevant wholesale markets and market share on the related retail market, are 3 points in time, i.e., 1 July 2018, 1 January

2019 and 1 July 2019 by municipality. Subsequent to the Administration having opened consultation on the preliminary draft on 30 April 2020, the PTA received information as of 1 January 2020. In March 2021, the PTA received such data for 1 January 2021. The PTA will revise the statistics of the analysis on the basis of that information. The PTA plans, subsequent to this, to collect such information once a year with the end of year figures of each year. One can expect that the figures for 1 January 2021 will be received by the Administration in February to March 2022. Apart from this, the PTA has information on distribution of networks, broken down by municipality in connection with the infrastructure database that the Administration operates, as of 1 January 2021. The PTA also has information on market share in retail for the whole country as of 1 January 2021, and the PTA has collected such information systematically twice a year for many years, in connection with general gathering of statistics.

In this way, the PTA can see the development by municipality since about mid-2018. The PTA thought that it was not in accordance with proportionality to request such information, backdated many years. In its answers, here above, the PTA has discussed its projections on development of distribution of fibre-optic networks and development of market share on the relevant wholesale markets and related retail market and refers to that. The PTA will furthermore update this projection in its revised analysis, see Appendix A.

Míla refers to paragraph 511, where there is discussion on Siminn market share in the Capital City Area in retail on figure 6.9.

Míla states that, according to the figure, Siminn was below 40% in many locations in the Capital City Area and according to paragraph 475, Siminn was below 40% in the Capital City Area as a whole. As parties other than Siminn purchased local loops from GR, where they could, one can expect that the GR share in retail would be over 60% during the lifetime of the analysis and thus, GR would have SMP in an area where the vast majority of the population of the country lives, and not Míla. It is worth noting that the figure showed the position from mid-2019. In the light of the development, one should consider it necessary that the PTA used a forward-looking methodology and defined the whole Capital City Area as a separate geographic market.

The position of the PTA

The PTA notes that the Administration will update these figures on the basis of the status at the end of 2020. Figures for mid-2019 were the most recent that the PTA had on hand when the first draft was consulted on 30 April 2020.

The PTA notes that it was the conclusion of the analysis that there was no reason to demarcate geographic markets on the relevant map markets in this country. For this reason, no party can have SMP in specific areas, because the country is a single geographic market.

Apart from the above, the PTA does not agree with Míla that one can expect that the GR market share in the Capital City Area will be over 60% during the lifetime of the analysis. At the end of 2020, it was [...], after having been [...]% at the end of 2018. At the end of 2020, GR's market share in the company's entire operating area was [...]%, after being [...]% at end of 2018. In this regard, the PTA considers it more appropriate to look at the entire GR area of

operation, not just part of it, i.e., of the capital area. Given the indications on potential development on the relevant wholesale markets, which were detailed here above, the PTA expects that the GR market share could be around [...]% in the in GR's entire operating area at end of year 2023. Among the factors taken into account are the new agreement between Siminn and GR, the closing of the PSTN voice telephony system and the Míla first steps in the 10-year plan to decommission the copper system, but it balanced with the fact that Mila's fibre roll-out plans seem to be much more ambitious than GR's plans for the rest of the market analysis lifetime.

It is furthermore taken into account that today; GR has completed deployment of fibre-optic networks in the Capital City Area where Míla has under 70% distribution in that area. Míla has provided the PTA with the information that the company will allocate significant funds in the coming years to further fibre-optic deployment, without having been able in October 2020 to provide information on the potential number in the coming years and was certainly not able to give this broken down by municipality. The PTA considers there to be every likelihood that a significant proportion of the funds Míla intends for fibre-optic development in the coming years will be used to increase connections in the Capital City Area, which has the greatest economy of scale. For this reason, there is every likelihood that there will be a further levelling between the Míla and GR fibre-optic network coverage in the Capital City Area. This should strengthen Míla's position in competition with GR. Mila's rollout plans for 2021 to 2023 finally received mid June 2021 confirm the conjecture made above.

It is therefore not inconceivable that large service providers, such as Vodafone and Hringdu, that now have the majority of their customers on the GR network, will increasingly move to the Míla network during the lifetime of the analysis. This further significantly improves Míla's position in competition with GR.

Míla refers to paragraph 514, where it is stated that in the operational territory of Tengir, the position was not entirely analogous to the position of GR in the Capital City Area as Tengir distribution to households and companies was about 75-90% while GR has over 90% and up to 100% distribution in the Capital City Area. In Dalvíkurbyggð, Tengir had nevertheless over 90% distribution, but under 75% in Hörgársveit. Míla noted that the figures for Tengir distribution, e.g., in Hörgársveit, were probably based on false premises.

Míla also referred to paragraph 516, when it was stated that Míla wholesale share in local loop lease was widely below 40%, and otherwise under 50% in the Tengir operational territory. The share in bitstream lease was on the other hand higher because of the Míla local loop lease from Tengir.

Míla said that more detailed information had not been provided on Míla market share in local loop lease in the operational territory of Tengir, but the fact alone that the market share was under 50% in a duopoly should mean that Tengir had SMP in this area with 51-100% market share. Despite that, Míla was said to have SMP, except in a number of very small municipalities. The reason for this was that Siminn still had more than 40% market share. Linking Míla obligations with Siminn market share was in the opinion of Míla incorrect. This would lead to a situation where if Míla had 0 market share then the PTA would come to the

conclusion that Míla had SMP in the area on the local loop market. Míla considered that such was not tenable.

The position of the PTA

Míla considers that the PTA assertion that Tengir distribution in Hörgársveit was under 75%, hardly held and was probably based on false premises. According to data from Tengir, Tengir distribution reached [...]% homes and companies in the municipality as of end of year 2020.

The PTA points out once again that the Administration considers there be no reason to segment geographic markets on the relevant wholesale markets in this country, neither by Tengir operational territory nor by that of GR. In the opinion of the PTA, the country is thus one geographic market which means that no company can have SMP in the Tengir operational territory. Míla has, however SMP in the country as a whole, both on Market 3a and 3b.

Here above, the PTA has answered why the Administration feels that it is reasonable to base selection of areas for further geographic analysis, among other things on market share of the parent company of Míla, Siminn, on a related retail market. Reference is made to this. The PTA has admittedly withdrawn use of the criteria of 40% Siminn market share and under and now intends to apply 50% market share and under.

Míla refers to paragraph 517 where it is stated that according to PTA data, there had not been a significant change in market share at the retail or wholesale levels within individual municipalities during the above specified 18-month period. The PTA considered that the situation would not change significantly during the lifetime of the analysis with regards to the development of market share. As local fibre-optic networks had been taken into operation, shares had changed at some locations, but there, the customers were so few that the shifting of a few customers had an impact on shares in the municipality.

Míla noted that there were no statistics or data published to support this PTA assertion and Míla considered that they would not stand up to inspection or at least were misleading. Taking only the previous 18-month period was a wrong methodology in market analysis and not in accordance with guidelines that the PTA should follow when making such analyses One must consider it perfectly clear that Míla and Siminn had lost significant market share in previous periods, i.e., before the PTA 18-month period began, in many areas in the Capital City Area. It was clear from the data published by the PTA, that Míla market share on the local loop market would have collapsed when fibre-optic networks were available from other parties and particularly if Míla had not had its own fibre-optic network. This, however, always took 1-3 years, and Míla considered it clear that if this development continued then Míla would fall below the 50% mark in the whole of the Capital City Area during the lifetime of the analysis. It should also be perfectly easy for the PTA to examine changes from the previous market analysis and predict Míla market share and those of others on the market 3-4 years into the future.

Míla considered it also clear that the lifetime of this market analysis would be 5-8 years and not 2-4 years as the PTA appears to maintain. Important known factors, such as the decommissioning of PSTN on copper, agreements between municipalities and the Icelandic state on fibre-optic rollout and agreements between municipalities and parties to the market

on development were factors that the PTA should examine carefully and take into account in its assessment.

The position of the PTA

The PTA has now also collected data on market share at wholesale and retail levels at the end of 2020 and will update its analysis, accordingly, see Appendix A. The PTA will therefore use five points in time in the two- and half-year period instead of 18 months. The PTA will next call for end of year figures for 2021 early in 2022 by municipality and then annually after that. The PTA considered there to be no reason for the purpose of this analysis and with a view to proportionality when gathering data to collect information on this development within municipalities during a number of previous years. The PTA would doubtless have done this if the Administration had come to the conclusion that there was no longer a substitution between copper and fibre local loops and/or that it was necessary to segment geographic markets on the relevant wholesale markets.

The PTA considers that because of commercial interests of parties, it is not appropriate to publish detailed breakdown of information on market share at wholesale and retail levels by municipality. This does not change the fact that the PTA has this information and uses it in its geographic analysis.

As previously stated in PTA answers here above, the PTA will revise its projections on potential development of market share at a national level throughout the lifetime of the analysis. It is not possible for the PTA to make a breakdown of the projection by municipality, among other things because Míla could not even, in October 2020, give the PTA a likely prediction at national level of the increase in the company's fibre-optic local loops during the year 2021, and certainly not for 2022 or 2023. At the end of April 2021, the PTA had not yet received Mila's roll-out plans for the year 2021, despite repeated requests in January, February and the beginning of March 2021. In October 2020 could Míla only provide the PTA information on the planned funds that would be allocated to development by year, but as has been stated before, these are significant funds which means that continuing vigorous fibre-optic deployment can be foreseen for Míla throughout the lifetime of the analysis. The roll-out plans when finally made available to the PTA support this finding.

The PTA entirely rejects that the lifetime of this analysis will be 5-6 years. The PTA has previously stated that it is not expected that the lifetime of this analysis will exceed 3 years, if that, because of various changes and development that are likely in the near future on the relevant wholesale markets and related retail market. Factors involved in this are among other things, uncertainty about development and impact of 5G rollout, a level of uncertainty about the distribution of Míla fibre-optic local loops and how this distribution will be structured in the near future, the closure of the Siminn PSTN system, some uncertainty about the decommissioning of the Míla copper system, possible changes with respect to migration of service providers between the GR and Míla networks, the nature of the impact that the new agreement between Siminn and GR will have and [...]. It is therefore not unlikely that the PTA will need to commence a new analysis of the relevant wholesale markets sooner than later. These are all factors that are difficult to predict, despite detailed data collection in September and October 2020 and in fact until March 2021.

Siminn considered it necessary to discuss differing conditions in competitive circumstances and development of market share, that had taken place since 2013, which the PTA had mainly left out of its analysis.

Siminn defined the GR operational territory as the following municipalities, which was as per distribution in excess of 50% in mid-2019: Reykjavík, Seltjarnarnes, Kópavogur, Garðabær, Hafnarfjörður, Mosfellsbær, Akranes, Borgarbyggð, Hveragerði and Ölfus. Síminn did not include Rangárþing Eystra and Rangárþing Ytra, as GR distribution in those municipalities was not known precisely, except that GR had finished deployment of fibre-optic in urban kernels at Hella and Hvolsvöllur. Nor was there any discussion about Árborg, although GR today has more than 65% distribution, while on the basis of the PTA preliminary draft, GR seemed to have exceeded 50% by mid-2019.

Today there were two companies in the area, i.e., GR and Mila, who offered local loops for the purpose of selling Internet service and the same two companies offered bitstream service. Both companies rented local loops to electronic communications companies and also sold bitstream service to electronic communications companies. GR made it a condition that GR bitstream service was purchased if an electronic communications company wished to use the GR local loop to offer Internet service, and that company was developed with P2P topology. GR had not wished to offer passive access to its local loops and had received the support of the PTA for this position.

GR only offered fibre-optic local loops while Míla offered both xDSL and fibre-optic connections Míla fibre-optic connections had GPON topology, which was considerably less expensive in development than the P2P system that GR had developed, and it could be deployed much more quickly. GR fibre-optic local loops reached all homes in the area while the Míla fibre-optic local loops reached only about 60-70% of homes. All homes in the area therefore had a choice of at least one fibre-optic as an option to copper local loop, while about two thirds of homes had the option of a fibre-optic connection from two companies.

Nova, Vodafone, Síminn and Hringdu were operating as retailers. Other parties were smaller, and it was difficult to see who they were and therefore whether they had local service or not. It was established that Nova did not offer its fixed wirebased solution outside the GR territory and nor did it offer Internet service over an xDSL system, nor fibre-optic service through the Míla system in the area.

In 2013, the municipalities that Siminn defined as the GR operational territory had just under 88,000 dwellings. At the end of 2019 the same municipalities had about 96,500 dwellings. This was an increase of about 8500 dwellings.

In 2013 the GR fibre-optic system reached just under 58,000 homes and the company had 23,000 active connections. The GR system had thus reached 66% of homes in the area and the company then had 26% of homes as customers. According to the PTA preliminary draft, GR had about 52,000 active connections in mid-2019, and thus about a 55% proportion of connections, probably somewhat higher at end of year 2019.

At the end of 2013 the proportion of homes in the GR territory doing business with Siminn with Internet service was [...]%. At the end of 2019, that proportion had [...]

At end of year 2013, Hringdu had 3911 connections, while at end of year 2019 they had increased to 10,815. Hringdu had its operations first and foremost in GR territory, although some connections were outside that area. It is likely that about 80-90% of Hringdu connections were in the GR territory and one could therefore assume that the thing to share was just under 10%.

Nova had entered the market for Internet service over fixed line connection in 2016. At end of year 2019, Nova had 17,228 connections. Then number of dwellings in the defined GR territory was 96,500 which meant that the Nova share in the area was 18% and appeared to have grown from 15% as of mid-2019. Nova was the company that had grown most how in each six-month period from the time that the company began to sell Internet service over a fixed line connection, though the company had no operations outside the GR territory. No customers had for example increased by 4000 in 2019 at the same time as Siminn had increased its customers in area by about [...]. Nova customers had increased on average by about 334 per month in 2019.

[...]

When one considers the number of dwellings in the area, the number of connections of Hringdu, Siminn and Nova, then Vodafone probably had about 32,000-34,000 connections in the GR operational territory, which would give the company about 32-35% share in the GR territory and end of year 2019. In this way, the difference between the Siminn and Vodafone shares was not significant in the understanding that Siminn could be considered to have SMP.

In summary, the situation on the GR operational territory was such that Míla probably had less than 50% share in local loops for Internet service, and bitstream service, and Siminn probably had less than 40% market share in retail. All of these conditions indicated that all obligations on the Group should be lifted, whether this was on the basis of competition law or electronic communications law, in the defined GR territory. On the contrary, the PTA announced increased obligations on the Group.

In 2013, Mila probably had over 70% share, while Siminn had more than 40% share in retail. This area covered 67% of all dwellings in the country.

One could not see better than that since the end of year 2013 until mid-2019, GR had increased connections in the area by 30,000 and moved from a 25% share, up to a 55% share.

The position of the PTA

Siminn is here proposing that the GR operational territory be defined as a separate geographic market. The PTA has previously replied to comments from Siminn and Míla in the Section on choice of areas for definition here above and has rejected them. Reference is made to this. and the PTA considers no need to pursue or correct individual assertions by Siminn in the above comments that are extensive, as the PTA came to the conclusion that the whole country was a single geographic market. One may however note that the Siminn market share in the GR operational territory was [...]% at the end of 2020 after having been [...]% in that area at the end of 2018. Siminn states that Míla had doubtless less than 50% market share in this area and that GR probably had about 55% share. The reality was that Míla market share was [...]% in this area at the end of 2020 and the GR share was [...]%. If the whole GR area was included, i.e., also Árborg and Reykjanesbær, the Míla market share was [...]% and that of GR was [...]%.

It is remarkable, however, that Siminn considers that only some municipalities in which GR operates, and not all, are included in this area. In the opinion of Siminn, Árborg and Reykjanesbær, where GR operates and is now responsible for deploying fibre-optic networks, are not included in the area. The PTA can only assume that Siminn does this in its attempt to show the appearance of the company and Míla in a worse position in the "GR operational territory" in question, as Siminn wishes to define it, as Siminn and Míla have a very large market share in the above specified two municipalities. If Siminn were to suggest defining areas by operational territories of specific companies, this would clearly not hold.

Siminn considered that the Tengir operational territory, which covered Eyjafjörður and other areas in the North-east part of the country, where the company had achieved over 50% distribution in mid-2019, included the following municipalities: Akureyri, Eyjafjarðarsveit, Hörgársveit, Svalbarðsstrandarhreppur, Þingeyjarsveit, Dalvíkurbyggð, Grýtubakkahreppur and Skútustaðahreppur. This would have been 9710 dwellings at end of year 2013 and 10,668 dwellings at end of year 2019.

It was established that Tengir had more than 50-60% connections with customers in the relevant areas, which meant that Míla was below that proportion. In neighbouring areas, Míla probably had close to 100% share, which had remained unchanged for a considerable period of time. This proved that competitive conditions differed. If competitive conditions were homogeneous, then the Míla share would not have dropped below 40% in a few years. In this connection, it would have been a key issue that the PTA had analysed market development, but as usual, the Administration did not do so. In the analysis for Decision no. 21/2014, it was stated that Tengir had had 1700 homes as customers and its distribution was 4500 homes.

This meant that the Tengir share in the area had changed from being just under 20% of dwellings in 2013, up to 60% of dwellings in 2019, which was manifestly a substantial change and very unlike other neighbouring areas. It was not known how the division was in bitstream connections and not possible to estimate that in this area. It was established that Tengir offered passive access to its system, unlike GR. There was no doubt that in this area, Míla did not have SMP and in the opinion of Siminn, there was little likelihood that the Tengir position would change in the coming years.

Competition in the area appeared to be only between Vodafone and Siminn. With regards to the Vodafone performance, one could simply point to the company's public apology for its poor business practices in the past years and that it intended to change this. If Nova entered the market, it was difficult to say how quickly the company would increase its share. It was however a fact that Nova had from its founding, emphasised the Capital City Area in its actions. It was not because of a shortage of access to local loops or bitstream service that Nova was not offering service in the Tengir operational territory. This means that it was not issues that related to this market that prevented Nova from offering its service in the area in question and for this reason, obligations on Míla on these markets would change nothing with regards to whether new parties entered the market or not.

The position of the PTA

The PTA refers to its previous answers here above with respect to fact that the Tengir operational territory is not a separate geographic market. Reference is made to this. The PTA sees no reason to correct the numerical information presented in this comment from Siminn. The PTA does however state that the Administration had not neglected analysis of market development in the municipalities that Siminn believes to belong to a separate geographic market in that area, nor in other municipalities in the country. The PTA also states that it is not unlikely that more retailers will enter the market in Tengir operational territory during the lifetime of the analysis, [...].

Siminn stated that municipalities outside the operational territories of Tengir and GR are very small and thus the share could change quickly, simply as a result of a few connections switching between companies [...]

The largest challenge to providing service in these areas for companies that had operational headquarters in Reykjavik, was the cost per customer. With fibre-optic rollout it was likely that operational costs on each customer would decrease as there was more stability in fibre-optic local loops than in xDSL, and thus fewer operational problems, which meant less likelihood that there would be a need to visit a customer, which in turn would lead to less operational risk and cost. This operational cost was considerably higher in the countryside than in the Capital City Area, as it was easier to serve more customers in a short period of time and efficiency was greater as there was no need to travel long distances. This showed the importance of encouraging fibre-optic rollout for the whole country.

Siminn reiterated that although the share was high at a specific point in time, the situation could change so quickly, in those municipalities where Míla was the only party with an xDSL system, with the entry of new party where Míla did not have fibre-optic, so there was significant doubt as to whether the company could be considered dominant at those locations where fibre-optic rollout was expected. For this reason, this factor needs to be carefully examined. This also applied where Internet service over 5G was expected.

One could for example point out the development in the urban kernel in Ólafsfjörður, which was part of the Fjallabyggð municipality. In the mid-2018, Siminn had [...]

Another example was the development in the municipality of Ölfus, where GR had entered on the basis of unlawful state support. [...]

A drop of [...] customers in Hveragerði had led to the proportion of dwellings with Internet service with Siminn having dropped by [...]

This demonstrates how a few connections can have a significant impact on market share and in the same way, how limited the information was that was provided by the points in time used by the PTA. It also showed how reasonable it would be to group together post codes where competitive conditions were similar instead of separating by municipality, many of which could vary significantly in size and composition, with respect to urban kernels and rural areas.

The PTA reiterates that the Administration came to the conclusion that there was no reason to segment geographic markets in this country but considered there to be a reason to prescribe lighter obligations on Míla in areas with more competition The PTA plans to review the list of such municipalities on an annual basis. In this way it would be possible to capture large fluctuations in Siminn retail share, but the PTA does not have the grounds to make a projection on this, with great certainty, at this point in time.

With respect to the Siminn reference to the Ölfus municipality and the Hveragerði municipality, the PTA points out that they are two of the 17 municipalities that are included as areas with more competition and thus lighter obligations on Míla.

In its answers here above, the PTA has clearly explained why the Administration considers that municipality boundaries are more appropriate for selection of areas for further analysis, rather than postcodes.

6.5.5 Pricing and possible price difference in wholesale and retail by area

Míla commented on paragraph 518 where it was stated that an important criterion when identifying whether competitive conditions might vary between areas was the possible price difference between them at both retail level and wholesale level. If pricing of the potential SMP operator and pricing of his competitors were the same or similar across the whole country, i.e., not significantly variable between areas within the companies in question, this could provide indications that competitive conditions were not sufficiently heterogeneous between areas to justify separate geographic markets or varying obligations by area. This on its own did not however always have to be the reality, as from the point of view of consumers, there could be a significant difference between "competitive areas" and areas where limited or no competition pertained, despite the fact that the potential SMP operator's prices were the same across the country.

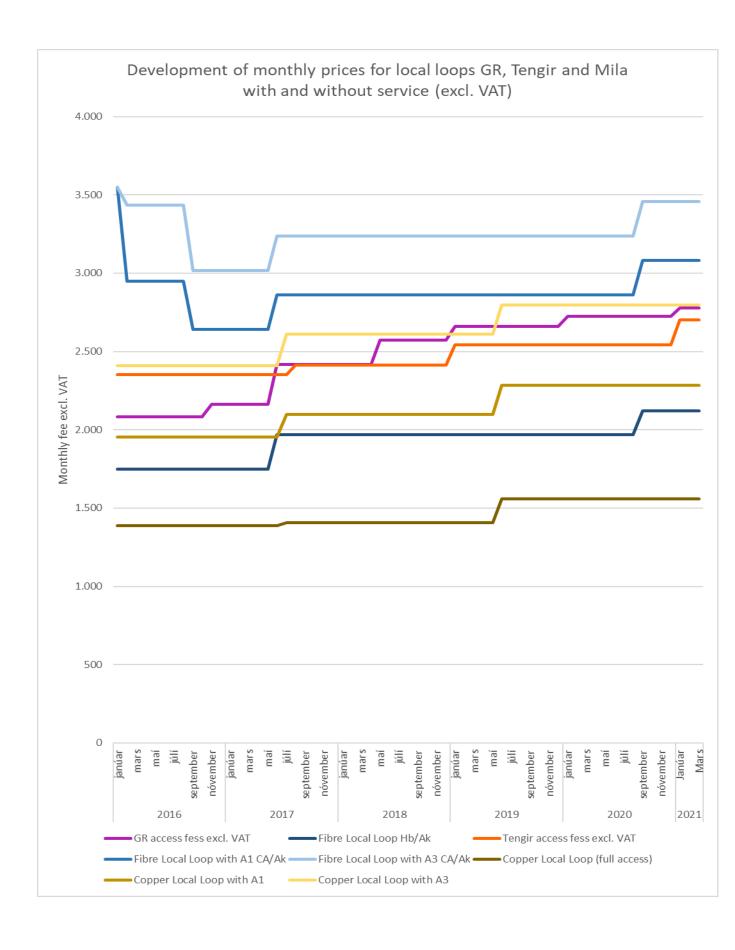
Míla pointed out that one needed to keep in mind that Míla was subject to price control on copper and had the same price across the whole country for that reason. With respect to fibre-optic local loops, there was a price difference at wholesale level. Retailers seemed however to keep the same price across the country, possibly because they were trying to simplify their tariffs and not cause dissatisfaction in the end users who would otherwise pay varying prices by geographic area. Míla had often seen that other network operators used the Míla cost analysed prices as a reference for their prices. Míla had for example seen this, both with Tengir and Snerpa when doing business with those companies.

The position of the PTA

In this paragraph, there is discussion on guidelines from BEREC. The PTA is conscious of the fact that price control on copper local loops allows for the same wholesale price applying across the whole country and the Administration has therefore been taking into account the Míla tariff for fibre-optic local loops and the retail price when examining whether there are indications of considerable varying market conditions by geographic area. The PTA cannot see that there is anything wrong with Tengir and Snerpa taking into account the prices on the

market, but this is, in the opinion of the PTA, an indication that active competition does not pertain on the relevant wholesale markets, as these parties are small compared with the Míla local loop network.

The PTA has examined monthly prices for fibre-optic local loops from Míla, Tengir and GR. In the following figure one can see the development of wholesale prices for Míla, Tengir and GR local loops. The figure also shows Míla prices with the addition of a charge for Access Options 1 and 3.



The wholesale prices from the beginning of 2016, are examined, and in that year, Míla commenced deployment of fibre-optic local loops and prior to that time, Míla leased fibre-optic local loops were very few compared with the number today.

As can be seen in the figure, there is an increase in mid-2017 that all the companies participate in. Then it varies by party, how the prices have developed. The Míla price for fibre-optic local loops did however not increase for more than 3 years, or until autumn 2020. Meanwhile, prices increased both at Tengir and GR, as there were general price increases during this period and the building index increased by 12.5% from June 2017 until September 2020. Both GR and Tengir then raised their local loop prices on 1 January 2021.

When comparing prices of fibre-optic local loops in wholesale, one must keep in mind that GR delivers its local loops with bitstream and the same applies to Míla GPON local loops, and the proportion of local loop price alone to the price of local loop with bitstream is not necessarily the same between companies, and other factors that can have an impact on price, such as where, and how the product is delivered. One must also note that in addition to an access charge, GR collects a charge from electronic communications companies for Internet, IPTV and VoIP access. For this reason, the PTA considers that behaviour on the retail market gives a better picture of competition, and there are indications that competition is significantly limited in retail.

The Competition Authority agrees with this in its comments. The Competition Authority (the CA) considered there to be indications that competition was significantly limited in retail for local loop access when one considered the fact that there had been little or no price competition in line or access charges in recent years. With respect to retail of Internet service with Siminn and other retail companies, there seemed to be no distinction made in the tariffs of these companies to consumers, depending on whether retail service was delivered with fibre-optic technology or through an xDSL connection on the copper network. The retail price of Internet connections appeared thus to always be the same regardless of the technology of the access system, or local loop, in this specific context.

Míla commented on paragraph 519, where it was stated that when the potential SMP operator set the same price across the whole country, with the objective of maximising profit, he had to find a balance between pricing where he had a monopoly position (dominant position) and lower prices where he was in competition with other players on the market. The likely conclusion was a compromise between these two prices, as the price was lower as the "competitive area" was larger. If the "competitive area" was sufficiently large, the pricing of the potential SMP operator should be rather low, and in addition to which, the price difference between him and his competitors should be small. Under such circumstances, it would be justifiable to conclude that the geographic market was the whole country because of widespread common pricing constraint.

Then it was stated that in those instances where the "competitive area" was on the other hand, small, the "monopoly price" had more weighting in the pricing decision of the possible SMP operator and there could thus be a significant difference between his price and that of his competitors. This probably led to a situation where the potential SMP operator had a low market share in "competitive areas". This means that consumers could perceive a significant price difference. While consumers could only purchase relatively expensive service from the

potential SMP operator in areas where there was little or no competition, a relatively large number of them could purchase less expensive service from competitors in the "competitive areas". In such instances, considerations on margin squeeze could be good arguments for having the country as one geographic market, despite the fact that the potential SMP operator maintained equal prices across the whole country.

Míla said that it collected varying prices depending on whether it was a competitive area or not. That indicated that there was competition, otherwise the price in the Capital City Area would probably be the same as in the countryside. Míla also pointed out that the cost of connecting fibre-optic varied by area.

The position of the PTA

In this paragraph, there is discussion on guidelines from BEREC on geographic analysis from 2014.

Míla pointed out that the company collected varying prices depending on whether the area was competitive or not, and that indicated that there was competition. It is clear that there is more competition in some of Míla operational areas than in others. The question is, however, whether this difference will lead to competitive conditions in those areas where there is more competition, being sufficiently different from the areas where there is little or no competition to require segmentation of the areas into separate geographic markets. The fact that there is a certain price difference can also reflect varying costs, as Míla has often pointed out itself, among other things in a reply dated 22 September 2020 to a query from the PTA on 7 September last year.

The PTA particularly notes that although there is some difference in Míla wholesale prices by geographic area, consumers do not perceive such a difference at retail level.

With respect to the price for connecting to fibre-optic local loops, reference is made to the reply to the comment on paragraph 527 of the preliminary draft here below.

Míla comments on paragraph 523, where it is stated that it was important to examine pricing and possible price differences, both at wholesale and retail levels. In the opinion of the PTA, pricing at retail level had greater weighting in pricing at wholesale level in this assessment as it was this that the consumers experienced.

Míla states that here the PTA is presenting its "own assessment". The Administration said that "in its own assessment", the behaviour of a retail company was more important than that of a wholesale company. Míla objected to this, as it was more reasonable to examine behaviour in wholesale. Míla thus maintained varying prices depending on whether it was a competitive area or not, but at the same time Míla had tried to keep pricing moderate. Míla prices in the countryside were thus among the lowest on offer, even though the company was the only one providing the service. Míla had therefore shown a responsible attitude in its pricing and had not taken advantage of being the only company that offered bitstream service in some areas. The PTA had thus not demonstrated under or overpricing by the company It was not reasonable to suggest that such was the case with the company, without investigation or arguments.

In the BEREC discussion, the methodology used is to examine the difference from the point of view of the consumer, though one should also examine the wholesale price. As indicated in the BEREC discussion, it is not possible to only take into account the pricing of the SMP operator, because that party could then have an influence on demarcation of geographical markets by issuing varying prices. The prices of the Siminn Group, that are on offer to consumers are the same across the whole country. The same applies to other service companies on this market, they are not offering lower retail prices to consumers by area.

Míla comments on paragraph 525, where it is stated that in general the above specified analysis of pricing at wholesale level should be directed at the market that was being analysed in each instance. On the other hand, information on pricing on wholesale markets was not always readily available and it could be difficult to acquire such information. In such instances it could be useful to examine pricing on corresponding retail markets when analysing the relevant wholesale market. When such was not appropriate, the NRA should place greater emphasis on other criteria that needed to be examined. Despite the fact that an NRA encountered problems when conducting a detailed analysis of pricing, it can nevertheless be possible to examine whether market players could or were likely to use varying pricing by area or whether market players that offered their services solely in a specific area or areas, priced their service in a significantly different manner compared to that of the SMP operator.

Míla said that the PTA, as an NRA, had the authority to call for information, including about price. This means that it was not a valid reason to not analyse the market that it was not possible to acquire information. In the opinion of Míla, it was absurd that the Administration should omit examining pricing on the wholesale market for the reason that price information was not available. If this was the case, then the PTA analysis was not reliable in this respect.

The position of the PTA

In this paragraph, the discussion is about the above specified guidelines from BEREC, and the PTA referred to that discussion without specifically making it its own view. As is stated in this section in the analysis, the PTA gathered information on wholesale prices of the main parties to the market, and of a number of municipalities that operate local loop networks.

Míla commented on Paragraph 527 where it was stated that at retail level, it was not possible to determine any price difference by geographic area with the Siminn Group. The same could be said about competitors of the Siminn Group. Then there was no significant price difference between the Siminn Group and its competitors in Internet service at national level.

Míla said that at retail level, there was a price difference that the PTA had not noticed. In GR areas, installation was free, while elsewhere it was at the cost of users. This could represent significant cost.

What Mila says is correct and this seems to be the only difference in price that is returned in retail. In the opinion of the PTA, it is not a tipping point with respect to whether the market should be defined geographically or not that Mila on-site service is less expensive in the immediate environment of the company's operational sites, when the service market is the whole country. This is a one-off cost and a large part of increased cost in the countryside is per diem and other additional costs for travelling in the countryside, where distances are important. There are therefore clearly cost considerations that apply in this instance. This does not apply to the Akureyri area, where there is however, competition from Tengir, as costs there are higher for Mila as that area is not in the immediate environment of the company. In addition to this, the PTA considers that this one-off cost is not high in the light of the fact that the average consumer lifetime is doubtless counted in years rather than months. PTA sister institutions have in some instances come to the conclusion that such average lifetime is 60 months. It could easily be significantly longer, when it relates to the underlying carrying layer, than when switching service provider on the same carrying layer. The PTA consumer survey also indicates that Siminn customers are less likely to switch service provider than customers of other service providers.

As is stated by Míla, there is no charge made for delivering home connections over Míla fibre-optic in the Capital City Area. One reason for this could be that the Míla VDSL system is good in the Greater Capital City Area and in Akureyri, where among other things, vectoring is offered, and for this reason Míla could consider that the collection of a connection charge could delay transfer of customers from the Míla copper network to the company's fibre-optic network, which is Míla's long term objective. Though it is possible to achieve synergy with other Míla operations in the Capital City Area when implementing these connections, this does of course involve some costs. This cost is collected in one way or another for these local loops, and one could assume that it is collected with monthly charges in the Greater Capital City Area. When one has calculated connection cost and start-up costs, as presented in the Míla tariff, into the monthly charge, then the Míla price areas are in fact three, i.e., the Greater Capital City Area, Akureyri and the countryside. The cheapest is in the area where the costs are lowest. One may also point out that a sizeable proportion of fibre-optic local loops owned by Míla in the countryside were purchased after having been connected to homes, which means that it is not in all instances that a connection charge is collected in the countryside.

Míla commented on Paragraph 528 where it is stated that at wholesale level, Míla pricing of fibre-optic service varied by area. There it was stated among other things that the price of Access Option 3 in the countryside was ISK 1997.

Míla wished to correct the above specified price which was 1977 and not 1997.

The position of the PTA

The PTA is grateful for this comment and will correct the table that shows Míla prices. Míla prices increased in September 2020, after the first draft was consulted, and the PTA will therefore publish the current prices in the updated first draft (Appendix A).

Vodafone pointed out, in connection with paragraph 528 that the price to companies for some connections are on another price list and are higher.

With respect to paragraph 537, it was incorrect that prices had remained unchanged. Míla had started differentiating by whether the premises were a home or company and had made new prices for corporate premises.

The position of the PTA

In its discussion, the PTA was referring to monthly prices for fibre-optic connections to homes. As is stated here below in the discussion on paragraph 537, the PTA will revise the discussion in accordance with the comments.

Tengir refers to paragraph 537, where it is stated that the Míla local loop price for fibre-optic local loops has remained unchanged from 2016, but since 2016 there have been some price rises on the local loop price of Tengir and GR and that Míla appears therefore not to be following these price changes for local loops. In the opinion of the PTA, this raised the question of whether this constituted under-pricing by Míla.

Tengir emphasised this point, along with others of a similar nature, i.e., that related to indications that the Siminn Group kept prices down or even practised subsidies/under-pricing on Markets 3a and 3b and thus significantly impaired the competitive grounds of independent network operators. It was also important that the obligations that the PTA planned and considered necessary, worked in such a manner that Míla did not have the opportunity and incentive to discriminate against competitors in pricing.

The position of the PTA

In the replies here above, with respect to comments on paragraph 518, there is an overview of the development of wholesale prices of Míla, Tengir and GR for access to fibre-optic local loops from the beginning of year 2016. Then it is stated that Míla access prices for fibre-optic local loops were unchanged from June 2017 until September 2020. Míla had previously announced an increase that was to come into force on 1 May 2020, but it was postponed until last 1 September.

With respect to possible under-pricing by Míla, this comment will be answered in Sections 10.2 and 11.2, where there is discussion on possible and real competition problems on the relevant markets.

With respect to the Tengir reference to it being important that PTA obligations worked in such a manner that Míla did not have the opportunity and incentive to discriminate against competitors in pricing, then the PTA decided subsequent to consultation on the preliminary draft, to retract the imposition of an obligation for Míla cost analysed tariff for fibre-optic and to prescribe instead an ERT obligation. Reference is made to Sections 10 and 11 here later, with respect to obligations and to Appendix C, which discusses the conclusions of the additional consultation opened by the PTA on 30 October 2020. The PTA has therefore

⁷ The Míla tariff in July 2017 had been announced on 1 September 2016, but in fact the increase did not come into force prior to 1 July 2017. Míla explained that this had been a mistake.

reviewed its position with respect to an obligation for cost analysed prices for access to fibre-optic local loops. Obligations to provide access, for non-discrimination, transparency, accounting separation and cost accounting still apply to Míla, with respect to fibre-optic local loops. Such obligations should ensure that parties are not discriminated against by pricing.

Míla also commented on the above specified paragraph 537.

Míla stated that in this case, the Administration allowed itself to make serious insinuations about Míla. Míla criticised such insinuations, without any investigation, in an official document from the Administration. It was incorrect that the price for fibre-optic local loops had remained unchanged since 2016. That was clear to the PTA, as the Administration had requested information on this in April 2020 and had received this information. On 1 January 2016, the price for fibre-optic local loops had increased from ISK 1417 to ISK 1750 in the Capital City Area, which is about 24%. In 2017, the price had reached ISK 1970 and now in May, the price should have become ISK 2120, but that increase had been postponed until the autumn because of COVID-19. This means therefore, that in total the price of fibre-optic local loops from end of year 2015 until September 2020, had increased by about 49%. At the same time, the consumer price index (January 2016 to January 2020) increased by just under 10%.

The structure of the tariff for copper local loops had been changed in 2017 and from that time the price for copper local loops had increased by about 11%, while at the same time, the consumer price index had increased by about 8% (January 2017 to January 2020). One had to check whether the price for copper local loops in Iceland was far in excess of what the EU Commission used (Euro 9). This was public information and the PTA had all of this information. It seems that in this instance, untrue assertions of competitors were being echoed. The price for fibre-optic local loops outside competitive areas had remained unchanged from January 2016, but costs had increased from ISK 1417 to ISK 2300, which is actually 62%.

Míla then pointed out that the company had only deployed a limited number of fibre-optic local loops outside the south-west corner of the country. This had not been a comprehensive fibre-optic rollout but rather a case of investments being made in areas where this was most economic. As it should be clear to the PTA, there could be significant cost differences in fibre-optic rollout by area and number of households at each address.

Míla also pointed out that the prices the PTA presented as GR prices were in fact incorrect, as GR offered a quantity discount on its connections. This is something that Míla considered not to be possible because of the obligations that rested on the company. Míla considered that real GR price rises were limited because the company had increased the price on local loops by the collection having been moved to electronic communications companies, in order to be able to offer them a quantity discount.

If one considered the Míla countryside price, then it was correct that the price had not risen for some time, but planned price changes that should have come into force in May had been postponed. On the other hand, one had to keep in mind that the Míla countryside prices covered a larger part than simply countryside networks, i.e., included in this were often the most economic urban areas in the countryside. It was also appropriate to point out that the Míla countryside prices were mostly used where Míla did not face competition and it was

unlikely that it would be on fibre-optic local loops. One might therefore wonder what dubious considerations might lie behind keeping prices low at such locations.

The position of the PTA

With respect to possible under-pricing by Míla, this comment will be answered in Sections 10.2 and 11.2, where there is discussion on possible and real competition problems on the relevant markets.

The PTA agrees that this wording in paragraph 537 in the draft is not sufficiently precise. Given the information that the PTA had at its disposal when this was written, the last increase in Míla local loops was on 1 September 2016, according to a notification from Míla, and had not increased from that time. Shortly before publication of the PTA draft market analysis, it came to light that the increase that Míla had announced on 1 September 2016 did not go into the Míla system before 1 July 2017, because of a mistake, but the draft was not revised in accordance with this information. The PTA has altered its discussion on development of monthly prices of fibre-optic local loops in the revised analysis (Appendix A) in order to make it clearer.

With respect to the example taken by Míla about comparison of price rises with the index, it does not give a true picture in the opinion of the PTA to take the fibre-optic local loop increase from 31 December 2015 (the day before the tariff increase) until 1 September 2020 and compare it with indexed increases. The PTA considers it more reasonable in this instance to use the dates when the increase came into force, i.e., in the example taken by Míla that would be 1 October 2013 when fibre-optic local loops increased to ISK 1417 or 1 January 2016, when fibre-optic local loops increased to ISK 1750.

One also has to keep in mind, as the PTA has often indicated, that the Míla GPON local loops are not delivered without bitstream, but the product is rather delivered with bitstream, often on Access Option 1. Given the information from Míla dated 11 December 2020, there are only [...] Míla fibre-optic local loop sold without bitstream. This is [...]% of Míla leased fibre-optic local loops, if one bases this on the number of Míla fibre-optic local loops leased in June 2020. It is for this reason more normal to take into account development prices for Míla fibre-optic local loops with bitstream (often on Access Option 1), and this is the product that customers most often use, as the proportion of P2P local loops of the total Míla local loops is very small⁸. In the table here below one can see dates of changes to local loop price and prices for Access Option 1, that have led to changes in prices to the customers of this service:

225

⁸ Only [...]% of leased Míla local loops in June 2020 were P2P local loops, as access to local loop without bitstream is realistic.

Mánaðargjald ljósleiðaraheimtaugar Mílu afhent í aðgangsleið 1

Dagsetning/Hækkun á	Höfuðborgarsvæðið og Akureyri	Lands byggð	Vísitala byggingar- verðs			
1. ágúst 2013 - Aðgangsleið 1	3.105 kr	3.105 kr	118,7			
1. október 2013 - Heimtaug	3.217 kr	3.217 kr	118,7			
1. janúar 2016 - Heimtaug	3.550 kr	4.100 kr	128,2			
1. febrúar 2016 - Aðgangsleið 1	2.950 kr	3.900 kr	127,9			
1. september 2016 - Aðgangsleið 1	2.640 kr	$3.900 \mathrm{\ kr}$	131,6			
1. júní 2017 - Heimtaug	2.860 kr	3.900 kr	131,6			
1. september 2020 - Heimtaug og A1	3.080 kr	4.080 kr	148,0			
Hlutfallsleg hækkun 1. september 2020						
frá 1. ágúst 2013	-0,8%	31,4%	24,7%			
frá 1. október 2013	-4,3%	26,8%	24,7%			
frá 1. janúar 2016	-13,2%	-0,5%	15,4%			
frá 1. febrúar 2016	-4,2%	-4,4%	15,7%			
frá 1. september 2016	16,7%	4,6%	12,5%			
frá 1. júní 2017	7,7%	4,6%	12,5%			

As seen in the table, there were many changes to these prices from 1 January 2016 and up to mid-2017, but the prices remain unchanged from June 2017 until September 2020. In the table, these changes are compared with an increase in the building price index⁹. Then one must bear in mind in this connection that at the end of 2013 the leased fibre-optic local loops owned by Míla were only [...], and it was not before the first half of 2017 that Míla leased local loops exceeded [...]. In mid-2020. Míla leased fibre-optic local loops were [...]. In order to examine the development of price with Míla, the PTA considers it appropriate to consider the date where the Míla tariff policy was published at the beginning of 2016, as at that time there were significant changes made to the tariff, or even more so, on 1 July 2017 when changes/adaptation between local loop price and the price for Access Options 1 and 3 took place. If one examines the development of Mila's access price for fibre service from 1 June 2017 until 1 September 2020, the increase is below the index increase, i.e., the price for local loop in Access Option 1 did not increase at all in over 3 years and the increase then was 7.7%, while the building price index increased by 12.5%. Prior to that, i.e., in February and September 2016 reductions were made in the tariff, and as stated previously, Mila was commencing its fibre-optic rollout in 2016 and leased local loops were not many initially.

The price of Míla copper local loops increased by 11% from 1 July 2017 until 1 June 2019, while the building price index was 11% for the same period. The price for copper local loops in Access Option 1 is now ISK 2283 per month and there is thus a considerable difference in price between the company's copper and fibre-optic local loops. The last cost analysis of Míla copper local loops ended with the PTA Decision no. 8/2019 and was based on information on operational costs for 2017, while investments were indexed to average price level price in 2017, and investment plans for the years 2018 and 2019 were included in the equation. The PTA has now requested that Míla submit a newer cost analysis early in 2021, which will be

⁹ The building price index is used when considering costs for distribution of fibre-optic, as the largest cost item is civil works.

226

based on figures from 2020. It is very likely that the conclusion of that analysis will lead to increases in the Míla copper local loop prices and that in the future the difference will level between the prices of the above specified technical solutions, among other things because of significantly diminishing use in the copper network. By the nature of things, increases appear later when a company is subject to obligations for a cost analysed tariff than when pricing is free. What matters most in the opinion of the PTA is that with larger electronic communications companies, there is little difference in retail in prices to consumers, on the basis of whether the connection is over a copper or fibre-optic network. This fact strongly indicates that there is still substitutability between connections over copper and fibre-optic networks.

Míla also mentions that the company had only deployed a limited number of fibre-optic local loops outside the south-west corner of the country and that there had not been a comprehensive fibre-optic rollout but rather a case of investments being made in areas where this was most economic. There was furthermore a significant cost difference in fibre-optic rollout by area and by the number of dwellings at each address. It is stated there by Míla, that there is a cost difference by area, but as is seen in the answer following this one, the PTA considers that this is first and foremost, the reason for varying pricing by Míla between area, rather than strong competition on the relevant wholesale market and related retail market.

Míla comments on paragraph 538 where it is stated that the price difference between Míla local loop prices for fibre-optic in the most densely areas of the country on the one hand and in the countryside on the other, could be to some extent be explained by varying costs for each local loop in the areas in question. On the other hand, one might assume that part of the explanation for lower monthly prices for Míla fibre-optic in the Capital City Area and in Akureyri, was that these are the operational territory of GR and Tengir. In these areas, Míla was investing in fibre-optic where another fibre-optic system existed.

Míla stated that here the PTA agreed that the Míla prices varied because of competitive conditions. Later in the analysis, the Administration appears to have forgotten that conclusion.

The position of the PTA

With respect to the difference in unit prices of fibre-optic local loops between areas on the Mila tariff, it has been stated by Mila, among other things in the company cost analysis, that costs are higher in the countryside. This is among other things, confirmed by Mila in the company's reply, dated 22 September 2020, to a query from the PTA dated 7 September last year, specifically with respect to Market 3b, where price difference with respect to that service is much greater between the Capital City Area and Akureyri on the one hand and other areas on the other, than is the case for Market 3a. This price difference is described in more detail in the answer immediately here below.

There is also the fact that all state grants for rollout of fibre-optic networks in the countryside are because of this difference, as discussed in the PTA analysis. It is also clear that the number of spaces/dwellings at each address is significantly more in the most populated parts of the country, as there are more multiple dwelling buildings when compared with smaller urban

areas in the countryside. The number of spaces at each address has a significant impact on unit costs.

If the cost of investments and operation of fibre-optic local loops were analysed for each area in the country, it is likely that there would be a cost difference between areas, which means that the cost difference between areas for Míla between the two most densely populated areas of the country on the one hand and smaller urban areas and countryside on the other, can be explained by varying costs to a large degree or entirely.

It is then clear that for new parties, that do not have the same economy of scale as Míla, it is normal that they begin by showing an interest in development where population density is at its highest. This means that competition begins where it is most economic to deploy fibre-optic local loops.

The fact that the Míla price for access to fibre-optic local loops is not the same in the most populated areas of the country and elsewhere in the country indicates that competitive conditions differ there to some extent. It is however clear that there are cost arguments for collecting differing prices in these areas as has been stated by Míla. In the opinion of the PTA this is thus not a definitive indication that these areas are significantly different with respect to competitive conditions, particularly when one considers that electronic communications companies do not differentiate in price between these areas in retail, and similarly, these areas are not exceptional with respect to service offer or quality of connections to any significant degree.

Míla pointed out that the PTA seems not have taken into account differing pricing between areas with effective competition, where GR e.g. operated in other areas, but in areas with effective competition, Míla had e.g., not charged separately for installation of fibre-optic in order to meet comparative offers from GR in these areas.

The PTA had come to the conclusion that even though the Míla prices varied by geographic area on M3a and M3b, there were differing costs and that therefore this was not an indication of different geographic markets. The Míla tariff on M3a was as follows:

Lýsing	Eigandi nets	Mánaðarverð
Stór höfuðborgarsvæðið og Akureyri *	Míla	1.970 k
Fyrirtækjatenging - stór höfuðborgarsvæði og Akureyri *	Míla	4.980 k
Fyrirtækjasvæði - stór höfuðborgarsvæði og Akureyri *	Míla	4.980 k
Landsbyggð	Míla	2.300 k
Fyrirtækjatenging - landsbyggð	Míla	5.280 k
Fyrirtækjasvæði - landsbyggð	Míla	5.280 kr

As stated there, there was a 16% price difference in fibre-optic local loops between the GR/Tengir service territory and other areas. It was appropriate to note that the large majority of Míla fibre-optic local loops were in the GR/Tengir service territory.

If one considered Míla prices on M3b, one could see an even greater difference by competitive area, up to 80%.

Lýsing	Svæði	Aðgangsleið 1	Aðgangsleið 3	Stofnver
ADSL	Allt landið	725 kr.	1.239 kr.	3.166 kr.
Ljósnet	Allt landið	725kr.	1.239 kr.	3.166 kr.
Ljósleiðari Mílu (GPON)	Höfuðb.sv	890 kr.	1.267 kr.	0 kr. ¹
Ljósleiðari Mílu (GPON)	Akureyri	890 kr.	1.267 kr.	3.166 kr.
Ljósleiðari Mílu (GPON	Landsbyggð	1.600 kr.	1.977 kr.	3.166 kr. ¹

The position of the PTA

In an email to Míla, dated 7 September 2020, the PTA posed the following question to Míla:

"Why is the price difference between urban and rural areas for Mila fibre-optic on M3a about 17% (monthly charge per local loop) but about 67% (monthly charge for A1) on M3b, after price change last 1 September (was 80%)?"

In the Míla reply, dated 22 September 2020, it was stated that it was only 4 years since Míla had started to offer this service to any degree, and the service and its distribution was still in continuous development, particularly with respect to distribution and use of investments related to the service. On the other hand, there was the fact that Míla installed ONT at its own cost, regardless of where in the country the service was offered. By the nature of things, it was significantly more expensive to visit customers in the countryside, not least customers on countryside networks that had been deployed in rural areas, in connection with the project Iceland Digital Connected. Installation of ONT was part of bitstream service. *This factor weighed heavily* in the reasons for A1 service being more expensive in locations other than in the Capital City Area and Akureyri.

It was then stated in the above specified reply from Míla, that, in connection with the percentage difference between fibre-optic and bitstream in the Capital City Area and Akureyri on the one hand and the countryside on the other, the main reason was that usage of fibre-optic cables was much better than usage of bitstream equipment. In this way, there were many more connections on each GPON installation in the Capital City Area than in the countryside. Most of those who received fibre-optic would start to use it immediately or within a few years.

As was stated in Míla replies to the PTA question, the main reason for the price difference is differing costs, depending on whether the location was in the Capital City Area in Akureyri on the one hand or the countryside on the other.

The Mila tariff for fibre-optic connections on Markets 3a and 3b is as follows subsequent to the increase that the company announced in September 2020:

Area	Fibre Local Loop	Access Option 1	Access Option 3	Fibre Local Loop with A1
Capital area and Akureyri	2,120 kr	960 kr	1,337 kr	3,080 kr
Rural	2,480 kr	1,600 kr	1,977 kr	4,080 kr
Difference in %	17.0%	66.7%	47.9%	32.5%

As is shown in the above specified table, the difference between areas is 17% on Market 3a and 66.7% on Market 3b for Access Option 1, and 47.9% for Access Option 3. As Míla sells hardly any [...] fibre-optic local loops without bitstream or [...]% of Míla leased fibre-optic local loops, the PTA considers that it does not give a proper picture of what is on offer on the market to look at Míla fibre-optic local loops without bitstream as this is not a realistic option except for P2P local loops which are an absolute minority at Míla. If one considers Access Option 1 and fibre-optic local loop lease, the price difference between areas is 32.5%. The PTA considers, as previously stated, that this price difference results first and foremost from varying costs incurred in deploying and operating the networks and on less economy of scale in the countryside areas, rather than significantly differing competitive conditions between areas.

The PTA also notices that the Míla tariff does not cover Egilsstaðir, where Míla has fibre-optic connections to [...] spaces, and Austurljós has also deployed fibre-optic at that location and provides service over that network. Austurljós it is therefore providing Míla with competition in this area, but Míla has not included that area in the tariff for the Capital City Area and Akureyri. One can assume that the location and population density mean that the unit cost is higher in this area than in Akureyri.

Míla also notes that in areas with active competition, Míla does not, e.g., collect separately for installation of fibre-optic in order to meet comparative offers from GR. The PTA considers that this fact does not indicate that there is a significant difference in competitive conditions between these areas, as the amounts involved are not large. These are one-off costs, and when the amount is divided over the average lifetime of a customer, the amount is negligible. European PTA sister institutions have in some instances come to the conclusion that such average lifetime is at least 60 months. According to the conclusions of the PTA consumer survey, there is no reason to expect that this period of time is shorter in this country, and in addition to this, Siminn customers are less likely to switch than customers of its competitors.

In the light of the above it is the conclusion of the PTA that varying Míla tariffs result first and foremost from cost factors rather than that market conditions differ significantly between areas.

6.5.6 Other aspects, including marketing policy, marketing behaviour, the service offer, quality of connections and nature of demand by area

Míla states that there is a difference in service offered by area, as Míla offers 1 Gb/s speed in the areas with effective competition, but only 500 Mb/s outside them.

This is not an entirely true assertion from Míla that the company only offers 1 Gb/s speed in the areas that Míla defines as competition areas. Míla offers 1 Gb/s speed more widely, e.g., at Snæfellsnes and Skagafjörður. The fact that Míla rather offers 500 Mb/s in the countryside, where the company offers fibre-optic, and not 1 Gb/s as in the Capital City Area, does not indicate in the opinion of the PTA that competitive conditions are significantly different between these areas, such that there is reason to segment geographic markets. One cannot see that this difference manifests itself in Siminn Group marketing, nor with other service providers that have access to the Mila fibre-optic network. Neither for service over fibreoptic, nor for VDSL on a copper network where 50 Mb/s are generally on offer and widely 100 Mb/s where vectoring is applied. The PTA considers that, according to the PTA consumer survey, where most of those who had access to VDSL considered their connection adequate for the needs of the household, and this applies even more to 500 Mb/s fibre-optic connections. The PTA believes that the general user does not make any significant distinction between 500 Mb/s and 1 Gb/s connections today and that the same will apply during the lifetime of this analysis, regardless of what may come to pass in the future. In this connection, one can mention that many other factors have an impact on consumer experience with respect to performance of network connections, not least capacity of wireless network connections within homes, which is dependent on very many variables, such as other wireless networks in the vicinity and the nature and thickness of partition walls in the premises. It should not be difficult for Mila, and not so costly, to upgrade these connections to 1 Gb/s if and when there is general demand for this.

Míla commented on paragraphs 539-542, which contains discussion on other factors in price that NRAs can take into account when identifying potential difference in competitive conditions between areas. One can find discussion on factors such as marketing policy, market behaviour, service offer, quality of connections and nature of demand by area. The PTA considered these factors not sufficiently heterogeneous between geographic areas to justify separate geographic markets.

It was stated by Míla that the company disagreed with the PTA that there was no difference between the areas. One had to keep in mind that Iceland was a very sparsely populated country. Siminn had been subject to obligations and Míla was subject to obligations for single price for copper local loops across the whole country and for quality level on delivery and service (EoI). It was therefore not out of the ordinary that customers received the same service and same quality and price, despite the areas being different, both with respect to costs and competition. The result of single price across the whole country was that the Group was shouldering significant costs for the countryside which led to smaller market share in the Capital City Area. This did not mean that this was a single geographic market.

Míla considered it inappropriate to assess the wholesale market on the basis of how retail companies differentiated themselves on the market. Both prices at wholesale level and start-up costs vary by area. Though the price difference at wholesale level was not large, then this was not the case when it came to start-up costs, i.e., costs for installing connections at users' homes. In order to react to competition, Míla installed connections at its own cost in areas with effective competition, while the company did not do that in other areas. The price difference was therefore more than the PTA appeared to realise.

It was normal that demand should be similar across the country. Everyone naturally wanted the best possible connection. Historically, the Group had served the whole country and had in place an infrastructure that needed renewal. This had nothing to do with competitive position. Quite the contrary, this impaired the competitive position, as the Group had invested substantial funds in serving the whole country because of obligations and because it was a former monopolist incumbent.

The position of the PTA

Míla disagreed with the PTA that there was no difference between the areas. It was not normal that customers received the same service with the same quality and price, despite the fact that the areas differed, both with respect to cost and with respect to competitive conditions, when one had in mind that Iceland was an extremely sparsely populated country, that Siminn had been subject to obligations and that Míla was bound by obligations for same price on copper local loops across the whole country and for quality level with respect to delivery and service.

The PTA could not see otherwise than that Míla was thus confirming that customers receive the same service with the same quality and price across the whole country, where the service in question was on offer. The PTA considers it to be unlikely that Míla would relax quality requirements or provide poorer service in the countryside even if wholesale obligations did not apply to Míla. Siminn is not subject to obligations and nevertheless provides good service across the whole country.

Then Míla considers that the result of single price across the whole country was that the Siminn Group was shouldering significant costs for the countryside which led to smaller market share in the Capital City Area. This did not mean that the whole country was a single geographic market.

The PTA does not consider that the Míla market share is lower in the Capital City Area than in the countryside solely because the company's copper local loops are priced in the same manner across the whole country. At many locations in the countryside, there was no other network than that of Míla on offer, which meant that the Míla market share at such locations was to all intents and purposes, 100%. Where another network is on offer, as for example in the operational territory of GR and Tengir, the Míla market share is by the nature of things, smaller. The PTA has come to the conclusion that despite the fact that competition in certain municipalities is more than in others, there is not such a difference in competitive conditions between areas that it would justify geographically segmented markets, but only lighter obligations between areas.

Míla considered it inappropriate to assess the wholesale market on the basis of how retail companies differentiated themselves on the market. The PTA also precisely considers that alleged varying competitive conditions between areas needs to be reflected in such a manner with respect to consumers that they perceive a significant difference by area with respect to factors such as price, quality, characteristics and nature of service, promotional and sales policies of electronic communications companies etc., that justifies geographic segmentation of markets.

Míla states that both prices at wholesale level and start-up costs vary by area. Though price difference at wholesale level was not large, this was not the case when it came to start-up

costs, i.e., costs for installing connections at users' homes. In order to react to competition, Míla installed connections at its own cost in areas with effective competition, while the company did not do that in other areas and for this reason the price difference was greater than the PTA appeared to realise.

Here, Míla is admitting that price difference at wholesale level is *not large*, but that it is if the difference in price of connecting to end users is also kept in mind. With respect to the price for connecting to fibre-optic local loops, reference is made to the reply to the comment on paragraph 527 of the preliminary draft here above. In the opinion of the PTA, it is not a tipping point with respect to whether the market should be segmented geographically or not that Míla on-site service is less expensive in the immediate environment of the company's operational sites, when the service market is the whole country, and reference is made to the PTA answer here above in Section 6.5.5.

Then Mila said that it was normal that demand should be similar across the country. Everyone naturally wanted the best possible connection. Historically, the Group had served the whole country and had in place infrastructure that needed renewal. This had nothing to do with competitive position. Quite the contrary, this impaired the competitive position, as the Group had invested substantial funds in serving the whole country because of obligations and because it was a former monopolist incumbent.

The PTA considers that this Míla comment supports the conclusion that competitive conditions between areas in this country are not sufficiently heterogeneous to justify segmented geographic markets, but only imposition of varying obligations by area. There Míla is explaining why demand is the same across the whole country and is not attempting to demonstrate that it differs between areas.

6.6 Conclusion with respect to geographic definition of the wholesale market for local access with fixed connection (Market 3a)

Vodafone wholeheartedly agrees with the PTA position that the geographic definition of the markets in question is the country as a whole. As is stated in the draft, there are no known examples from Europe that the existence of only two networks, including the network of the former monopolist, had justified geographic measures on the relevant market. Simply for this reason, all attempts by the Siminn Group to force narrower geographic demarcation than the country as a whole should be rejected. On the other hand, one cannot avoid making a comment on the PTA plans to use as a criterion for areas with more competition that the following 3 conditions be fulfilled. That is to say:

- 1. That there is a fibre-optic network that competes with Míla in the relevant area, which has distribution to at least 75% of households and companies.
- 2. That the Siminn market share on the retail market for broadband service is under 40%.
- 3. That the Míla market share in leasing local loops is under 50%.

The only PTA arguments for these criteria was that they were in accordance with the BEREC guidelines. No examples were however mentioned from Europe where these criteria have

been applied, so it seems that they are home-made. In the opinion of Vodafone, the PTA does not have authority to apply anything other than Icelandic law when deciding whether to impose obligations on access to networks and service. The criteria that the PTA is obliged to apply are listed exhaustively in paragraph 3 of article 28 of the Electronic Communications Act. It could not be seen that appropriate grounds could be found in the provision, for the home-made criteria that the PTA plans to use. Vodafone objected to the plans to withdraw access obligations in those areas that the PTA had defined as areas with effective competition. In other respects, Vodafone supported the PTA plans to maintain and tighten obligations that were intended to be imposed on Míla.

The position of the PTA

It seems to the PTA that Vodafone has misunderstood PTA plans. The PTA does not plan to segment geographic markets in this country, but only to decide on varying obligations by areas with little or no competition on the one hand and areas with more competition on the other. The PTA is thus not accepting Siminn's "attempts" to force a narrower geographical demarcation than the whole country, but the matter rather revolves around the implementation of obligations.

The PTA also rejects that the only arguments provided by the Administration for criteria for selection of areas for further analysis is the BEREC common position with respect to geographic analysis from 2014. The PTA also took into account the ESA recommendation on the relevant markets, ESA guidelines on market analysis and the main principles of European competition law, having taken into account the circumstances in this country. It is completely wrong when Vodafone says that there are no precedents for such criteria in Europe. It is sufficient to refer to the detailed PTA discussion on precedent from Europe in Appendix A1.

The PTA furthermore follows Icelandic law in all respects, and in article 16 of the Electronic Communications Act it is stated that the PTA shall define geographic markets in accordance with the main principles of competition law and obligations pursuant to the EEA agreement.

Míla objected to the conclusion in the PTA preliminary draft with respect to geographic analysis, as badly researched and in reality, incorrect. One could not come to any other conclusion than that there were strong indications, both with respect to the structure of the relevant Markets 3a and 3b and behaviour of parties to the market, that significantly differing competitive conditions pertained between the 3 areas, i.e., where there was effective competition, where one party operated a fibre-optic system and areas where fibre-optic system would not be on offer during the lifetime of the analysis. With reference to this, there was thus every reason for the PTA to review its preliminary assessment in this respect and segment the relevant service markets into a number of geographic markets.

In this connection, the PTA could easily take account of foreign precedent, where markets had been divided, see case from ANACOM in Portugal from 2016 (PT/2016/1888-1889) where cities had been defined as having effective competition areas where specific conditions were fulfilled, including when there was one other operator with a system which had more than 50% distribution within the area and with market share "MEO" at retail level of under 50% within the city in question. Míla considered that this condition could be applied in a

relatively easy manner to the circumstances that pertained in this country where GR and Tengir operated in competition with Míla on the market for fibre-optic. More examples could be mentioned from the Analysys Mason report.

The position of the PTA

The PTA rejects that the PTA geographic analysis is badly researched and in reality, incorrect. On the contrary, the PTA decision is supported by a very detailed geographic analysis, much more detailed than the Administration has ever embarked on before. The conclusion of the geographic analysis is furthermore correct in the opinion of the PTA, given competitive conditions in this country and expected development during the lifetime of the analysis.

The PTA reiterates that in this country there is no separate market for fibre-optic, as the Administration has come to the conclusion that there is still substitutability between copper and fibre-optic networks on the relevant wholesale markets and related retail market.

The PTA does not agree with Mila that there are strong indications that significantly differing competitive conditions pertain between 3 specific areas in this country, i.e. 1) where effective competition pertains, 2) where one party operates a fibre-optic system and 3) where a fibre-optic system will not be offered during the lifetime of the analysis. Here above, the PTA has argued why the PTA selection of areas for further analysis, which is based on specific objective criteria, is appropriate and suitable given the competitive conditions in this country on the relevant wholesale markets. The above specified division of areas into 3 by Mila is not compatible with the methodology. One has to take many more factors into consideration than the distribution of fibre-optic networks and market share alone, which relate to market structure Among other things, it is important to take into account the behaviour of parties to the market, with respect to aspects such as pricing, service offer, quality, marketing, etc., not least at retail level, where the user experience is analysed. For factors that are categorised under market structure to lead to demarcation of geographic markets, variety in structure needs to lead to specific behaviour of parties to the market, which differ significantly between areas. This is not the case on markets in this country.

Míla notes that the PTA could have taken foreign precedent into account, as geographic markets have been segmented, for example in Portugal. The PTA has precisely examined foreign precedent in some detail and among other things, explained most of them in Appendix A1.

When the above specified precedents are examined, it comes to light that the case in question in Portugal from 2016 is not at all typical for the criteria that the NRAs in Europe have applied in geographic demarcation of markets on the relevant wholesale markets. The PTA points out that the precedent in question, where the conclusion was reached with respect to one criterion, that two networks were sufficient, only applies to market 3b not 3a. There is no example in Europe of only two networks, including the network of the monopolist incumbent, are considered to suffice for it to be justifiable to segment geographic markets. ANACOM placed very strong emphasis on access to ducts and conduits for some considerable time, in order to strengthen infrastructure competition. Such access has not been particularly common in this country. When the ANACOM analysis in question was made in 2016, the SMP operator had barely commenced fibre-optic rollout. The PTA therefore considers it not possible to apply

this Portuguese case to the circumstances pertaining on the relevant wholesale markets in this country.

Míla refers to Section 4 in the Analysys Mason (AM) report from 1 July 2020. It was stated there that EU states were faced with varying circumstances and had chosen various routes in geographic analysis of markets. Here one could mention Portugal, United Kingdom and Spain. Similar routes could be chosen here in Iceland.

In the case of Portugal, ANACOM had differentiated competitive areas and areas where there was no competition. Municipalities belong to competitive areas if 1) there were at least two competitors MEO that had more than 50% distribution of next generation networks (fibre-optic or cable systems) or 2) that there was one competitor MEO that had more than 50% distribution of next generation networks (fibre-optic or cable system), and a retail department MEO under 50%. About 56% of the inhabitants of Portugal belong to areas where competition pertained. It was possible to apply the latter condition to Iceland, where GR and Tengir compete with Míla on the local loop market.

Reference was then made to the UK case, where Ofcom had in January 2020, published a consultation document, entitled "Promoting investment and competition in fibre networks – Wholesale Fixed Telecoms Market Review 2021-2026". With respect to local loop Market 3a, it was planned to segment two geographic markets, i.e., 1) a market where there was already some distribution of electronic communication networks on commercial terms by competitors of Openreach, or that such would be financially feasible in the future and 2) a market where it was unlikely that distribution by Openreach competitors would take place in the future on commercial terms.

Ofcom thus took future development into account, i.e., did not apply existing distribution of networks or market share statistics, but concentrated on regulation that supported the policy that had been formed, i.e., distribution of high-speed networks on commercial terms. This had taken place in reality in Iceland, see GR and Tengir. Circumstances in the United Kingdom were in many ways different from circumstances in Iceland, as Openreach had been separated from BT and only operated at wholesale level under a strict non-discrimination obligation (EoI), not unlike the Settlement between the Siminn Group and the Competition Authority.

AM finally referred to the case in Spain from 2016. In that case, CNMC had analysed 66 municipalities (35% of Spain's population) on Market 3a, where competition pertained on a market for next generation networks (fibre-optic or cable system). There needed to be at least 3 networks that all had over 20% distribution in the municipality. This was a forward-looking methodology where existing distribution could be very small.

On Market 3b for homes, CNMC had analysed 758 telephone exchanges (60% copper local loops) that constituted a competitive market. These were the telephone exchanges where at least two competitors of Telefonica each had at least 10% market share in retail, and where the Telefonica share was less than 50%.

The PTA refers to the Administration's reply here immediately above to the Míla comment and reference to the above specified case in Portugal from 2016.

With respect to the UK case from January 2020, which is a consultation document, so those plans have not become a reality and it is impossible to predict whether they will become a reality. Then there is the fact that the UK is no longer in the EU, nor in the EEA market. The status of fibre-optic rollout in the UK is furthermore quite different and worse than in this country, such that competitive conditions are not at all comparable. The PTA is not aware that any state in the EEA has taken the route prescribed by this plan. It is therefore not possible to see this as precedent that could apply in this country.

With respect to the Spanish case, 3 networks are needed for an area to be segmented geographically on Market 3a. This is in accordance with what the PTA has previously said that no precedent can be found in Europe, where two networks have sufficed for such segmentation on that market.

Míla stated that with respect to whether an area could be considered to have more competition, the PTA had applied the previously specified 3 conditions that needed to be fulfilled in the relevant municipality, i.e. 1) that there is a fibre-optic network that competes with Míla in the relevant area, which has distribution to at least 75% of households and companies, 2) that Siminn market share would be under 40% on the retail market for broadband service and 3) that Míla market share in local loop lease was under 50%.

Míla pointed out that the requirement for 75% distribution of other networks was very strict. In Portugal, the criterion was for example 50% distribution of another network. In Denmark, the reference was 75% distribution to homes and companies were thus not included. This clearly meant that the distribution requirement there was in reality in the range of 50-60% of homes and companies.

The position of the PTA

It is true when Míla says that in its preliminary assessment, the PTA proposed 3 conditions for Market 3a, but only the two first mentioned on Market 3b. Subsequent to consultation on the preliminary assessment and the subsequent additional consultation, the PTA proposes to withdraw the third condition on Market 3a, i.e. that which relates to a specific Míla market share, and to relax condition number 2 on both markets such that the reference would be 50% Siminn market share instead of 40%. With this, the number of municipalities increased that belong to areas with more competition, from 6 on Market 3a and 7 on Market 3b to 17 on both markets. This meant that area today covered municipalities where about 70% of the country's inhabitants lived.

In the light of the fact that in this country the requirement is only two networks, including the Míla network, the PTA considers it not appropriate to reduce the condition that the network of the Míla competitor had to achieve 75% distribution. The PTA reminds that in Europe the reference has always been at least 3 networks on Market 3a and there are very few examples of only two networks being considered adequate on Market 3b.

With respect to the Míla reference to the Danish precedent, the PTA does not agree that the impact is as the company states. Distribution needs to have achieved 75% of homes. The inclusion of companies in this country for which a normal household connection suffices, cannot be more burdensome in the opinion of the PTA, as it is clear that a large proportion of companies have access to fibre-optic connections and electronic communications companies generally strongly emphasise fibre-optic rollout to them.

Mila said, with respect to linking Míla obligations among other things to Siminn retail share, that Siminn was an independent legal entity and was among other things, bound by detailed conditions from the Competition Authority. Given the meaning of paragraph 5 of article 45 of the Media Act, including in the light of administrative and case law precedent, one could expect Siminn to enter into other electronic communications networks with its service during the lifetime of the analysis.

Míla also considered it most inappropriate to take into account Siminn market share on the retail market for Internet service when assessing Míla market strength on geographic parts of local loop Market 3a, where Míla clearly had a minority of local loops.

In many instances, Míla collected local loop charges for municipalities that requested that Míla do so. This was done for a minimum fee, generally about 10% of the charge. This could in other words not be considered a Míla strength on the local loop Market 3a in a specific area when Míla collected local loop lease from Siminn for the owner of the system, which then collected a line charge from the end-user. Míla was not the owner of the fibre-optic and only received a low fee for collecting the local loop lease charge.

The position of the PTA

While Míla was a subsidiary of Siminn, the PTA considered it unavoidable to apply a specific Siminn market share in the choice of areas for further analysis, in addition to the above specified criterion on a specific distribution of a network of a competitor of Míla. In the opinion of the PTA, it is irrelevant that Siminn is an independent legal entity, as the PTA considers Siminn and Míla to be a single economic unit in the understanding of competition law. Nor does it matter that Siminn is subject to conditions from the Competition Authority, subject to the Settlement between the Siminn Group and the Competition Authority, as those conditions do not have much weighting with respect to selection of areas for further geographic analysis in this market analysis. Then the PTA points out that the Administration has now decided to increase the criterion with respect to Siminn market share to 50% from 40%, which significantly increases the number of municipalities in the category of areas with more competition.

The PTA furthermore considers that the provisions of paragraph 5 of article 45 of the Media Act have no relevance here. The fact that Siminn has now made an agreement on bitstream access to the GR fibre-optic network was among the factors that the PTA took into account when it decided to increase the above specified boundary from 40% to 50%. The agreement in question can, on its own, in the opinion of the PTA, not justify completely retracting the application of a specific Siminn market share on a related retail market. The PTA considers that competitive conditions where Siminn has more than 50% market share, do not give any

reason to slacken in any way the obligations. The PTA also reminds that the Administration has retracted the application of a specific market share for Míla in this analysis but notes that it is not inconceivable that this condition will be applied in the future, for example if Siminn should sell Míla.

The PTA does not understand the purpose of the Míla comment that in many instances Míla collects the local loop charge for municipalities that so request, and that this cannot be considered a strength of Míla on Market 3a in specific areas when Míla collects local loop lease from Siminn for the owner of the system, which then collects a line charge from the end-user. Then Míla stated that it was not the owner of the fibre-optic and only received a low fee for collecting the local loop lease charge. Obligations will solely rest on fibre-optic local loops operated by Míla, and market share is only calculated on this basis.

Míla said that the condition for Míla market share in local loop lease being under 50%, did not take into account that because of sparsity of population and of how extensive the areas were, the market would not support more than two local loop networks, though the PTA actually admitted in its analysis that this was the case. Under such circumstances, it was clear that one of the two parties would always have over 50% market share.

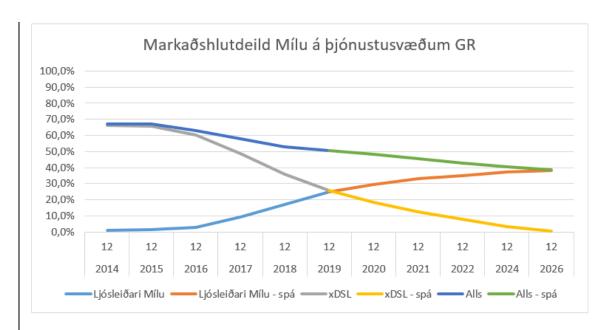
It was in fact clear, that this PTA requirement of the above specified 3 conditions was such, and even presented for that purpose that a situation was structured where competitive conditions could almost never be considered to pertain. This methodology in the opinion of Míla would never stand up to closer inspection.

The position of the PTA

Subsequent to national consultation on the preliminary draft and additional consultation, the PTA decided for the time being to retract the condition that municipalities categorised under areas with more competition, and thus lighter obligations, had a specific market share on Market 3a. There was no provision for such a criterion on Market 3b.

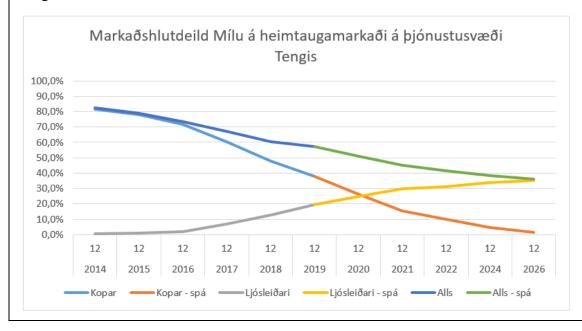
The PTA rejects that the criterion presented by the PTA in the preliminary draft had been of this nature or put there for the purpose of structuring so that competitive conditions could almost never be considered to pertain in such a manner that there was reason to segment geographic markets or to apply lighter obligations in specific areas. Since the preliminary draft was submitted, the PTA has announced plans to relax somewhat the criteria in question, as previously explained. The conclusion of the PTA geographic analysis in this instance is however that competitive conditions between the two areas are not sufficiently heterogeneous to justify segmented geographic markets, but the PTA considers there to be reason to apply lighter obligations in the area where more competition is deemed to pertain.

Míla criticised that the PTA should not take into account likely development during the lifetime of the analysis. The following figure shows how Míla considered that the company's market share had developed from 2014 to 2019 in the GR area, and how the company considered that it would develop in the coming years.



As one could see, the Míla market share was none in fibre-optic in 2014 but was about 33% today and expected that it would be about 38% in the year 2026. The market share in copper would develop in the opposite direction, i.e., it was 67% in 2014, was about 19% today and would progress to 0% in the year 2026. In the figure one can also see that the Míla market share on the local loop market was about 67% in total in 2014, was about 49% today and would be about 38% in 2026. Míla considered it clear that GR had SMP in its operational territory, regardless of whether one considered fibre-optic on its own or combination of copper and fibre-optic.

As one can see from the figures specified below, the trend was that Míla market share on the local loop market would have dropped to well under 40% in those municipalities where Tengir offered service:



The PTA totally rejects that it had not endeavoured to make a prediction on likely development of market share during the lifetime of the analysis in its preliminary draft. Subsequent to national consultation, the PTA gathered detailed data from electronic communications companies with the intention in mind to endeavour to predict likely development in a more reliable manner. The PTA has thus updated its projection in the revised draft (Appendix A), and in addition to this the PTA has here above answered various comments from the Siminn Group that relate to this issue. It was stated there that the PTA allowed for the Míla market share on the relevant wholesale markets being well over 50% on both markets in question at the end of the lifetime of the analysis, i.e., at end of year 2023. Reference is made to this discussion, as well as to Chapters 6 and 7 of Annex C.

It proved most difficult to get detailed distribution projections from Míla, which can have a significant impact on development of market share on the relevant wholesale markets, and the company could only, in October 2020, provide the Administration with statistical information on planned funds that the company intended to use for fibre-optic rollout during the coming years, but not estimated quantities, and certainly not a breakdown of quantity figures by individual municipality. Míla could in fact not even provide the PTA with such information for the year 2021, the PTA had not received the information in question at the end of April 2021, despite repeated requests to that effect. This means that, along with many other uncertainties, that PTA projections on development of market share during the lifetime of the analysis on the relevant wholesale markets cannot be very exact, and no better than the information that the Administration receives.

The PTA however does not agree with the figures presented by Míla in its comment on market share today, market share in the future or in Míla projections. The PTA reiterates that the lifetime of this analysis is not until end of year 2026 as Míla seems to assume. The PTA does not expect that the lifetime of the analysis will be longer than 3 years, even shorter if there are substantial changes on the relevant wholesale markets and/or related retail market, which is not unlikely as has previously been stated.

Míla states that the company's market share on the local loop market was 67% in total in copper and fibre-optic connections in the GR operational territory in the year 2014 and was 49% today. The PTA does not have information on Míla market share in the GR operational territory in the year 2014, as the PTA has not deemed that the area formed a separate geographic market. The PTA can however confirm that the Míla market share in the GR operational territory at end of year 2020, was 53% on the relevant market. The Míla market share was 83% at end of year 2013 on the local loop market at national level. The market share on the bitstream market was 65% at that time. At end of year 2020, Míla market share had dropped to 57% on both markets. This is the development over a seven-year period, at the same time as parties like GR and Tengir were implementing substantial fibre-optic rollout in their areas which is not expected to be as extensive in the coming years as it has been in recent years.

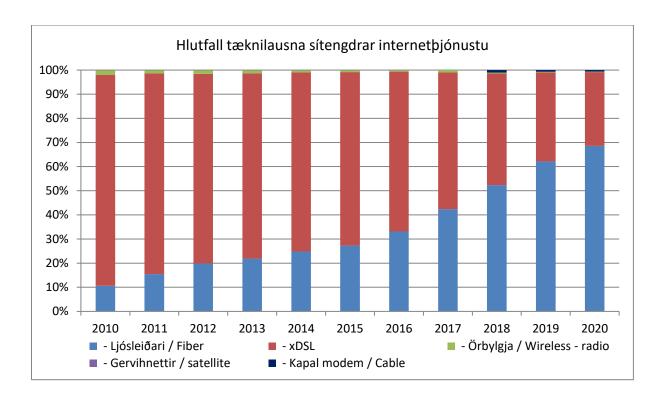
Míla has also during the lifetime of the analysis currently in force, implemented fast and vigorous fibre-optic rollout, particularly since 2016. According to information from electronic communications companies, Míla will implement even more fibre-optic rollout during the lifetime of this analysis than GR and Tengir, and there will thus be a significant

levelling in the number of Mila fibre-optics on the one hand and the joint number of fibre-optics of the company's competitors on the other hand during the lifetime of this analysis, and it is likely that the difference at the end of the lifetime of the analysis will be insignificant.

With the above in mind, the PTA considers it extremely unlikely that the Míla market share on Market 3a will have dropped to 38% on the local loop market (copper and fibre-optic) in the GR operational territory in 2026, but the PTA reiterates once again that the PTA does not consider that is a separate and distinct market. As stated here above, the PTA considers that there is every indication that the Míla market share will be over 50% at the end of this analysis at end of year 2023. Nor is it inconceivable that the Míla market share may increase during the lifetime of the analysis from its current size, e.g., if large customers that are mostly on the GR network today, switch to a larger degree or totally to the Míla network. According to information that the PTA has gathered from parties to the market, this is not out of the question.

Then Míla says that the Míla market share in fibre-optic is 33% in the GR operational territory. At the end of 2020 that market share was 34% in the GR operational territory and 32% at a national level, and one can expect this share to increase during the lifetime of the analysis, among other things because of substantial investments by Míla in recent years and months in fibre-optic rollout, because of plans for vigorous continuation of such development, because of the efforts that have been made towards increasing fibre-optic connections at the cost of copper connections and if large service providers increasingly move from the GR network to the Mila network. The PTA states however, that it is the conclusion of the Administration, that there is still substitutability between copper and fibre-optic connections, which means that it is the total market share for these technical solutions that are important in this context.

It is not true that market share in copper is only 19% in the GR operational territory today. The reality is that the percentage of total local loops was 36% at end of year 2020 at a national level and 28% in the GR operational territory. In 2018, the number of fibre-optic connections exceeded for the first time, the number of connections over copper, see figure below for share of technical solutions for always-on internet services:



In the light of information on distribution plans of electronic communications companies throughout the lifetime of this analysis, which is estimated at end of year 2023, the PTA considers that the gap will continue to widen between the above specified technical solutions. The PTA considers, however, that is not likely that this will happen at the same speed as in recent years, among other things because of the rather modest fibre-optic rollout plans of parties like GR, Tengir, Snerpa and Austurljós, and the fact that the main effort in decommissioning the Míla copper system will be after the end of the lifetime of this analysis and that Míla will first and foremost close copper systems in the lifetime of the analysis where the company itself has fibre-optic. The PTA expects that the proportion could have reached 75-80% fibre-optic at a national level against 20-25% in copper at end of year 2023.

Míla says that it is clear that GR has SMP in its operational territory, regardless of whether one considered fibre-optic on its own or combination of copper and fibre-optic. As previously stated, the PTA considers that there is substitutability between copper and fibre-optic. So, it is the total market share of copper and fibre-optic that matters in this context. The PTA has also come to the conclusion that there is no reason to segment geographic markets, so it is the market share at a national level that matters. At the end of 2020, the Míla market share was 57% on the relevant market at national level. One should note that the GR market share was 36% and Tengir had 5% at the same time. The Míla market share was 57% on Market 3b at a national level. In addition to the clear indications given by market share figures, there are many other factors that indicate a strong Míla position on the relevant markets, and these factors will be explained in more detail in Sections 8 and 9 in the revised draft market analysis (Appendix A). It is the PTA conclusion that GR does not have SMP on Market 3a and 3b in this country but rather, Míla.

Míla refers to Section 4 in the Analysys Mason (AM) report from 1 July 2020. There it was stated among other things that the PTA had not, in an adequate manner, examined the possibility of segmenting the country into areas where competitive conditions on the fibre-optic market differed significantly and would continue to do so.

There were two fibre-optic networks in areas where approximately 40-55% of the nation lived. This competition had already led to significant distribution in these areas, high speed, low price to end users and higher uptake of the service, without any kind of obligations on the networks in question. This was a positive result for inhabitants in this country and something that one should encourage. There was an opportunity to allow competition to flourish for this large proportion of citizens, which could lead to Iceland being a world leader in high-speed connections. It was likely that the copper system would be decommissioned in these areas as time progressed.

For the other 30-35% of the nation, one FTTH network would be on offer, which could be owned by GR, Míla, Tengir or municipality. In such areas there would in fact be a monopoly for the local network operator on either Market 3a (e.g., where the party in question leased dark fibre) or on Market 3b (if bitstream was only on offer, see e.g., GR). This local party would enjoy a very high market share and could have SMP, in a specific area or areas, though those parties that had received state aid offered access. The party with such local monopoly would normally not be Míla, as GR and Tengir have jointly much greater fibre-optic distribution than Míla. The copper network would be decommissioned in many such areas. If not, it would exert competitive pressure on the fibre-optic party.

The position of the PTA

AM states that the PTA had not, in an adequate manner, examined the possibility of segmenting the country into areas as competitive conditions on the fibre-optic market differed significantly and would continue to do so. AM assumes here that there is no longer substitutability between copper and fibre-optic, but as the PTA has repeatedly stated, the Administration does not agree with that. Reference is made to Sections 3 and 4 here above, to the same sections in the revised analysis (Appendix A) and Appendix C, in support of this. On the contrary, the PTA investigated in a very detailed manner, whether there was reason to segment geographic markets on the relevant wholesale markets, given that there was substitutability between copper and fibre-optic, but came to the conclusion that competitive conditions between areas were not sufficiently heterogeneous to justify this. The PTA also considers that development of fibre-optic networks during the lifetime of the analysis will be such that the greatest increase will be with Míla and that there will be a significant levelling between the Míla fibre-optic network and the networks of competitors.

AM refers to infrastructure competition having led to significant deployment of fibre-optic networks and high uptake of these networks, without any kind of price obligation on the networks in question. This is something that the PTA should continue to encourage.

The PTA points out that in the last analysis, Míla fibre-optic rollout had hardly commenced, which had been the single main reason why the PTA had not imposed a price control obligation on Míla fibre-optic. At the end of 2020, Míla had deployed fibre-optic to about 77,000 spaces (homes and companies) of 163,000 spaces at national level. Míla has stated 92.000 spaces but acknowledged the company could not allocate all connections to homes or

business. The investor report for Q2 2021 states that Mila's FTTH network reached 100.000 homes in the quarter. As mentioned earlier, there is probably a considerable underestimation, and it is probable that the number of homes reached was around or over 90,000 at this time. As previously stated, the PTA expects most distribution during the lifetime of the analysis to be done by Míla. Because of the above specified facts, and in the light of potential and actual competition problems that the PTA identified on the relevant wholesale markets, the PTA considered that it could not do other than prescribe an obligation for price control on the Míla tariff for fibre-optic in its preliminary assessment. There the PTF proposed that an obligation for cost analysis be imposed on Míla fibre-optic. Subsequent to consultation on the preliminary draft and an additional consultation, the PTA considered it more appropriate to impose on ERT obligation on Míla, as has been previously argued in Sections 10 and 11 on obligations later in this document, and in the same sections in the revised analysis (Appendix A) and in Appendix C.

Then AM says that for about 30-35% of the nation there will only be one fibre-optic network on offer, which would not in all instances be owned by Míla. This would be a monopoly situation. In the light of the fact that the PTA had come to the conclusion that there was still substitutability between copper and fibre-optic, the PTA considers that there will not be monopoly in areas where there are competitors to Míla, or where they have fibre-optic and Míla does not, during the lifetime of the analysis, to any significant degree. Míla has copper networks at those locations, and the PTA does not consider it likely that Míla will close them in any significant numbers during the lifetime of the analysis, but first and foremost will close copper networks where the company itself has acquired fibre-optic. In the opinion of the PTA, it would only be in very sparsely populated rural areas, which would not have an impact on the big picture of this market analysis. Monopoly will however pertain in areas where no party other than Míla operates a fibre-optic network.

Míla refers to paragraph 557 in the preliminary analysis where it is stated that instead of embarking on a detailed and time-consuming assessment of competitive conditions in each municipality in the country, and they are 72, the PTA considered it to be a more useful and appropriate method to define clear criteria on how to group the areas, i.e. on the one hand into areas with little or no competition and on the other hand into areas with more competition. Given the situation in this country, the PTA considered it important to base such grouping on more than one criterion. In accordance with the BEREC common position 2014, the PTA considered that it should not matter whether the area in question was operational territory of GR or Tengir for it to be possible to group them together, if competitive conditions were homogeneous between the municipalities in question.

Míla said that it disagreed that it should not matter whether the area was GR or Tengir operational territory. Míla pointed out that GR was 100% owned by a party in the public sector, as Tengir was in part.

The position of the PTA

The PTA states that the country's municipalities are 69 in total, after 4 municipalities in East Iceland, i.e., Fljótsdalshérað, Seyðisfjarðarkaupstaður, Djúpavogshreppur and Borgarfjarðarhreppur merged in Múlaþing in the spring of 2020.

Míla considers that the PTA should rather have categorised areas for geographic analysis according to operational territory of GR and Tengir, than define specific criteria. Here above, where there is discussion on selection of areas for more detailed analysis, the PTA has supported its methodology with arguments and reference is made to that. The PTA reiterates that competitive conditions within the GR operational territory and within the Tengir operational territory had not been sufficiently homogeneous for it to have been possible to take the route suggested by Míla. The PTA also points out that after the changes that the PTA made to the criteria in the additional consultation, by far the largest part of the GR operational territory belongs to an area with more competition. Furthermore, ownership of GR and Tengir does not affect the methodology that was chosen to decide which criteria are most appropriate when selecting areas for more detailed analysis.

Míla refers to paragraph 562 in the preliminary draft, where there was an explanation of the 3 criteria that the PTA plan to apply in connection with a decision on areas with more competition on Market 3a.

Míla did not understand why the PTA chose to apply the strictest conditions that could be found in Europe. Many countries applied 50% when it came to market share of related retailer.

The position of the PTA

The PTA points out that the Administration has, subsequent to consultation on the preliminary draft and to additional consultation, decided to increase the reference proportion for Siminn market share from 40% to 50%. The PTA also plans to withdraw the application of a specific Míla market share on Market 3a, and such a condition was not allowed for on Market 3b in the preliminary assessment. The PTA totally rejects that the PTA applies the strongest conditions to be found in Europe. Many European states apply, for example 40% market share in retail. But as in this country there is generally only one competitor to Míla in each area, in instances where there is such a party, the PTA considers it important to apply a rather high distribution proportion of the network of a party other than Míla, i.e., 75%.

Míla refers to paragraph 564 in the preliminary draft, where it is stated that when these 3 factors are taken together, then the municipalities of Reykjavíkurborg, Seltjarnarnesbær, Skútustaðahreppur, Svalbarðsstrandarhreppur, Grýtubakkahreppur and Tjörneshreppur were those where all 3 conditions were fulfilled.

If postcodes were used for the conditions in question, along with accurate basic data on distribution of fibre-optic networks, the conclusion of this test would change considerably. If, in addition, the decommissioning of PSTN and copper and the existing agreement between municipalities and the Icelandic state on fibre-optic rollout were taken into account, then there would be even more in the group. Finally, if a forward-looking approach on development during the lifetime of the analysis were applied, the increase would be even greater.

The PTA refers to prior answers and detailed arguments here above with respect to why the PTA considers that municipality boundaries are more appropriate and suitable criteria for the geographic analysis.

The PTA can agree that the results of the test might have been, by the nature of things, somewhat different if postcodes had been used instead of municipality boundaries. Postcodes and municipality boundaries are not harmonised except to a very small degree, and there are significantly more postcodes than municipalities. It would probably have been the case that more sparsely populated rural postcodes would fulfil the 75% distribution requirement for a network other than that of Mila. On the other hand, the reality is that the Siminn market share is generally very high in rural areas and at the vast majority of locations is over 50%. More specifically, Siminn has over 50% market share in the retail market in 48 municipalities out of 69 in the country and on average over 60%. For this reason, the PTA cannot agree with Mila that such a methodology for selection of areas would have changed the final conclusion to any significant degree.

Subsequent to consultation on the preliminary draft and additional consultation, the PTA has decided to review the list of municipalities that are classified as areas with more competition and to do this on an annual basis throughout the life of the analysis. In this way, taking development on the relevant wholesale markets into the equation will be built-in to the methodology. It is for example very difficult for the PTA to predict what impact the Siminn decommissioning of the PSTN voice telephony service, and the Mila decommissioning of copper local loops will have during the lifetime of the analysis. The newly published Mila plans for decommissioning the company's copper system are for example, very general and cover the coming 10 years, and in addition to this Mila states itself, that the plan is subject to considerable uncertainty. Mila has furthermore informed the PTA that subsequent to the transfer of specific assets and operations, from Siminn to Mila at turn of year 2020/2021. For this reason, the PTA considered it more appropriate to use such an inbuilt annual review of the list of municipalities categorised for lighter obligations, than to endeavour to predict various developments during the coming years with sufficient certainty, without having for that purpose, sufficiently reliable data, among things from Mila.

Míla refers to paragraph 566 in the preliminary draft, where it is stated that Míla was generally very strong in areas outside the 6 municipalities in question, i.e. over 50% and up to 100% market share. Míla's position was furthermore fairly strong within the 6 municipalities. The Míla market share was approximately [...] in the whole of GR operational territory and [...] in Tengir operational territory. Over the whole country, the Míla market share was 63% of the market in question.

Míla considered the PTA was not analysing the market properly, according to guidelines on implementing such analysis. Míla considered that the fundamental rule was to examine development on the market for the lifetime of the relevant analysis, and not to look backwards or take static status of the market. In this way, the PTA was not taking into account that during these years, the decommissioning of the largest part of the copper system would take place and that Siminn also intended to close their PSTN voice telephony system in the first quarter of 2021. This would mean that about [...] local loops would disappear from the Míla system.

It was not unlikely that Vodafone would also decommission its PSTN system during the lifetime of the analysis, which meant about [...] additional local loops. In this way, copper local loops would decrease by about 20,000 in the next 1-2 years. The PTA did not take these changes into account which would mean significant loss of revenue for the Siminn Group and would diminish the Míla market share significantly on the local loop market. Míla would thus not have a local loop system in large parts of the country.

The position of the PTA

As has previously been stated, the PTA for the time being, has retracted the application of 50% Míla market share on Market 3a and such a criterion was not present for Market 3b in the preliminary assessment. Now the requirement will only be a specific distribution of fibre-optic networks of Míla competitors and a specific Siminn market share on the retail market.

The PTA then reiterates that subsequent to the additional consultation the PTA had decided to revise the annual list of those municipalities that are categorised as areas with more competition, and thus had lighter obligations. The actual development on the relevant markets will thus be taken into account in this respect, in a direct and regular manner. The PTA considers this to be a more reliable method than trusting a projection on likely developments over the coming 3 years, as such predictions are subject to various limitations and can never be more precise than the information that the PTA receives from electronic communications companies. The various information that the PTA has recently gathered from Míla, for example on decommissioning of the copper system and plans for fibre-optic rollout during the coming years is very general, and rather inexact with little breakdown by municipality.

Míla refers to paragraph 570 in the preliminary draft where it states that it was the PTA conclusion that it was perfectly clear that effective competition did not exist on the retail market in question, despite the obligations resting on Míla, pursuant to the PTA Decision no. 21/2014 on wholesale markets for local loops and bitstream access and that the situation on the retail markets in question would doubtless be worse were it not for the wholesale obligations in question.

Míla stated that during the period, a Settlement had been in force between Míla, the Competition Authority and Siminn on separation of the companies. Separation was to ensure a level competitive situation and full parity of access to all Míla wholesale products. The PTA assertion appears not to allow for the existence of the Settlement in question and its impact on the market had not been investigated, and what is more, it seemed to be assumed that it made no difference.

The position of the PTA

The Settlement in question between the Siminn Group and the Competition Authority, does not change the fact that efficient competition does not pertain on the relevant retail market. At the end of 2020, Siminn had more than 46% market share and this has remained almost unchanged since end of year 2016, and in reality, changed very little during the lifetime of the analysis in force since 2014. The agreement between Siminn and GR from July 2020, could easily lift Siminn over the 50% level during the lifetime of the analysis. Apart from the

high Siminn market share, there is a great number of other factors that indicate the Siminn dominant position, such as vertical integration with Míla, which is by far the largest party on the relevant wholesale markets.

The separation between Siminn and Míla, and the non-discrimination obligation Míla refers to, and which can be found in the Settlement in question, has clearly not changed the situation to any significant degree. The Competition Authority is furthermore investigating whether Siminn breached the Settlement in question and considered such to be the case in its decision in a case that related to English football, see competition Authority Decision no. 25/2020. According to the PTA information, the Competition Authority is investigating other issues that could represent breaches of the Settlement in question, and even abuse of SMP. In its analysis, the PTA discusses in many places the Settlement in question and has not pretended that it does not exist. The PTA also reiterates that it has not changed the status on the relevant retail market to any significant degree or led to there being active competition.

Míla refers to paragraph 574 in the preliminary draft, where it was stated that according to Section 6.5 in the preliminary analysis, it was not possible to identify any difference in Siminn price policy, nor of the company' competitors at retail level by municipality. This was also the case with respect to quality of connections, service offer, marketing policy and the nature of demand. It was therefore the conclusion of the PTA that there was no significant difference in competitive conditions on the retail market for broadband service in this country by geographic area and that the geographic market is therefore the whole country.

Míla drew attention to the fact that when the PTA discussed, price and price policy, the Administration seems to have forgotten to take into account the start-up and connection charges that vary greatly between areas. In the GR service area, Míla offered installation of in-house cables for fibre-optic along with set up of 3 devices in the home, without charge. Outside the GR service territory, Míla charged for the following, which were included in the GR areas: in-house cabling at hourly rate, setting up equipment and start-up charge to the amount of ISK 3166. Míla knew that nor did electronic communications retailers charge for in-house cabling and set up in the GR areas, while most of them charged for the connection and setup charge that Míla billed outside the GR areas. It was therefore nonsense to maintain that there was no price difference in service between areas in the country.

The position of the PTA

With respect to alleged price differences on the retail market in question, the PTA refers to detailed answers to Míla comments in Section 6.5.5 here above and to the same section in the revised analysis (Appendix A).

Míla referred to paragraph 576 in the preliminary draft, where it is stated that the first factor that the PTA examined was whether the access barriers might possibly vary between areas. Then it had among other things been stated that one could conclude that access barriers for new entries to the market in question were significantly greater in rural areas than urban, both with regards to fewer possibilities to leverage economy of scope in developing networks and also with regards to costs for trunk line connections to provide service across the area. It was

however necessary to note that fibre-optic had been rolled out in the least populated areas by many municipalities, often with state support. Míla had however been purchasing and leasing a large number of such local networks in recent times and one could expect this development to continue.

Míla stated that here one could identify a misunderstanding by the PTA about trunk line connections and their impact on the structure of access networks. The Míla purchase and leasing of countryside networks was however a very small part of deployed networks, which means that this description is incorrect. It seems that the PTA conclusion is not based on any real data.

The position of the PTA

It is difficult for the PTA to understand where the alleged PTA misunderstanding might lie, with respect to trunk line connections and their impact on the structure of access networks. A party such as GR, has stated that high costs of trunk line connections are the main obstacle to the company embarking on development outside the company's existing operational territory. The PTA has received analogous complaints from more parties, such as for example, Nova and Snerpa. Trunk line connections belong actually to another wholesale market, i.e., Market 14/2004, which is now being analysed by the PTA. According to the last PTA decision on that market from 2015, Míla was designated as a company with SMP on that market.

The PTA does not consider that purchase, long term lease or deployment of state aided countryside networks by Míla is a very small part of deployed countryside networks, but if Míla means that it is a small part of deployed fibre-optic networks as a whole, then that is correct. The PTA expects furthermore that such purchase, long term lease agreements or deployment of state aided countryside networks by Míla could continue throughout the lifetime of the analysis.

Míla refers to paragraph 580 in the preliminary draft, where the PTA had collected information on retail and wholesale market shares and distribution of networks by municipality as of 1 June 2018, 1 January 2019 and 1 June 2019. The figures for the status on 1 January 2020 were expected.

Míla considered the PTA had examined far too short a period of time and that it did not describe market development well. It would have been most appropriate to examine development from the year 2014, when the current market analysis came into force, and to make a prediction about it for the lifetime of the analysis.

The position of the PTA

The PTA first gathered information on retail and wholesale market shares by municipality for mid-year 2018, then for 31 December 2018 and then for mid-year 2019. Subsequent to the preliminary assessment going into consultation on 30 April 2020, information was received for 31 December 2019 and recently PTA received numbers for the end of 2020. The PTA has now revised the analysis statistics on the basis of the last specified point in time. The PTA will then gather information on an annual basis by municipality as of each end of year, in the next instance early in 2022 for end of year 2021.

It would doubtless be good for the PTA to have such information longer into the past than mid-year 2018 but given that such gathering of information has been time-consuming and seems to be very burdensome for most parties to the market, the PTA does not consider it tenable and in accordance with proportionality to request such information for many years into the past. The PTA considers that the information that the PTA has at its disposal is adequate to come to a proper decision in this market analysis. The PTA can't see how older information would have changed the conclusion.

Míla refers to paragraph 582 in the preliminary draft, but it is stated that market share had not changed significantly at the above specified points in time at retail or wholesale level. The PTA does not expect there to be a significant change during the lifetime of the analysis in this connection.

Míla said that it was absolutely unclear how the PTA had come to this conclusion in the light of the fact that the company has lost 20% at national level on Market 3a, since the last analysis. The company had furthermore lost up to 65% of local loops in municipalities in the operational territory of GR. The PTA conclusion was therefore incomprehensible and appeared not to be supported by any data.

The position of the PTA

In the opinion of the PTA, the PTA conclusion is certainly not incomprehensible. This is a detailed analysis which is well supported by arguments. Of course, nor is it correct that the conclusion is not supported by data. It is precisely supported by detailed data, among other things by statistical information for five points in time, broken down by municipality. After the preliminary assessment was submitted for consultation, the PTA has furthermore gathered further data from electronic communications companies and among other things, commissioned a consumer survey. In the opinion of the PTA, these comments speak for themselves.

The PTA cannot see how it can be unclear how the PTA came to the conclusion that a company with just under 60% market share should be deemed to have SMP. Even if the company has lost a about 25 percentage point share during a seven-year period. This makes 3-4 percentage points reduction per year. Míla had an extremely high market share, about 83% at end of year 2013 on Market 3a which had become 57% at end of year 2020. It is worthy of note that the Míla market share on Market 3b has only fallen by a very few percentage points during the same period, from 65% to 57%.

One can however find one small municipality in the Capital City Area where Míla market share is around 35%, while Míla market share across the whole country was 57% at end of year 2020. The above specified municipality, Seltjarnarnes, which is a small municipality in the Capital City Area with about 2% of the inhabitants of the Capital City Area only is unique in that GR completed fibre rollout there for well over 10 years ago. For a long time, Míla only offered copper local loops at that location, though the company has recently commenced fibre-optic rollout and today has some hundreds of fibre-optic local loops there. It is not

-

¹⁰ From Registers Iceland.

unlikely that the Míla position will improve in the municipality in question if and then when, Míla completes fibre-optic rollout there.

Míla referred to paragraph 586 in the preliminary draft, where it was stated that at wholesale level it was not possible to identify significantly differing prices between Míla, GR and Tengir on the relevant market. There was more variation in the prices of the small local players that had enjoyed state support for their fibre-optic development. In the large picture they have little significance.

Míla stated that it was not aware of real GR prices, as the company granted fidelity discounts, but if there was not much difference, that indicated competition in the opinion of Míla. Unit prices that were provided did not tell the whole story.

The position of the PTA

It was difficult to compare Míla and GR, as neither local loop is provided without bitstream. The PTA does not agree that comparable prices necessarily indicate effective competition. One can point out that the Competition Authority has for example deemed that comparable or almost the same prices of fuel companies in this country have for some time been considered not to be an indication of effective competition. One also has to examine many other issues than price, when effective competition is assessed. It is the opinion of the PTA that effective competition is not in place on the relevant wholesale markets in this country and refers to discussion on this in Sections 8 and 9 in the revised market analysis and to the same sections here later in this document.

Míla referred to paragraph 587 in the preliminary draft, where it was stated that Míla wholesale prices on copper networks on the relevant market were level across the country, subsequent to price control obligations that were imposed with PTA Decision no. 21/2014. On the other hand, the Míla wholesale prices for fibre-optic on the relevant market varied to a small degree between urban and rural areas, about 16-30%, but no obligation was in force on price control. It is likely that it would also be the conclusion with respect to copper with Míla if the above specified price control was not in place. It was the assessment of the PTA that the Míla price difference in question could be explained by varying underlying costs, among other things because of varying deployment costs, and because of varying economy of scope between urban and rural areas, rather than by varying competitive pressure between these areas.

The PTA assertion on price difference between competitive areas and the countryside was simply wrong. Míla considered that a 16-30% price difference was certainly not insignificant for fibre-optic local loops, but on the contrary was significant. It was proper to point out that there was an 80% price difference on GPON bitstream service between competitive areas and the countryside, i.e., ISK 890 and ISK 1600. One would of course also need to take into account costs when deciding prices, and the fact that Míla did not charge excessive prices for fibre-optic local loops shows that the company priced by cost even when pricing was free. The fact that Míla priced its products by cost, indicates that price control obligations were not necessary to protect the company's customers.

Míla considered that the fact that GR, Míla and Tengir prices were similar, strongly indicated that there was effective competition. Míla did not in fact have information on the GR tariff, which was quite normal in the light of the fact that this was a company with greater market share than Míla in Reykjavik and a company in public ownership. Information could also be found in the PTA analysis on a difference in the terms that were on offer between GR competitive areas and other areas.

The position of the PTA

It is a correct comment from Míla that at this time, there was an 80% difference in the price of Míla GPON bitstream service by area. With changes in the Míla tariff, which came into force on 1 September 2020, this difference fell to 67% on access option 1 and 48% on access option 3 but was 17% on market 3a. The price difference is however considerably smaller when one has in mind that the great majority of external parties purchase both Access Option 1 in bitstream and local loop lease, or. 32.5%. The PTA will correct the text accordingly.

With respect to the difference in GPON bitstream service between areas, it is stated in the Mila reply dated 22 September 2020 to a query from the PTA, that this price difference can be explained by cost. It seems, therefore, not to be competition considerations that decide the price and reference is made to a detailed PTA answer in this connection in Section 6.5.5 here above. Mila also states in the above specified comment that the fact that "Mila does not put an excessive price on fibre-optic local loops, showed that the company *priced by cost.*"

With respect to the Míla assertion that the fact that GR, Míla and Tengir prices were similar, strongly indicated that there was effective competition, the PTA refers to the answer immediately here above.

Míla referred to paragraph 590 in the preliminary draft where it was stated that in the opinion of the PTA, it was clear that the price difference between Telia and local networks in Sweden was much greater than was normally the case between Míla and local networks in this country, and in addition, the importance of local networks was considerably less in this country than in Sweden. Only a few percentage points of users used such underlying networks in this country against tens of percentage points in Sweden. The Telia market share in Sweden was only 37% nationwide, while the Míla share was 63% here in this country. This case was therefore in no way comparable.

In this country, the price in local networks ranged from ISK 0 - 3600. Míla disagreed with the PTA that there was not a significant difference between Míla and local networks in wholesale.

The position of the PTA

As stated in the paragraph, the weighting of individual local networks owned by municipalities in the country's rural areas is not significant in this country, as there are often very few connections on such networks. The average monthly prices collected by municipalities are ISK 2.476 ex VAT, on the basis of information the PTA gathered during the analysis. The PTA has information about very few municipalities that do not collect a monthly charge for local loops. Examples of such municipalities are Tjörneshreppur, Fljótsdalshérað and Strandabyggð as well as a local network in Skaftárhreppur owned by

Digraklettur ehf. but these are small local area networks with only a few dozen connections each, and therefore do not matter in a large context in the PTA market analysis. Most municipalities (23 municipalities) collect a charge in the range of ISK 2300-2900 ex VAT. The Mila monthly price for fibre-optic local loop in rural areas was ISK 2300 ex VAT but increased to ISK 2480 ex VAT on 1 September 2020. The PTA therefore considers there not to be much difference between the Mila monthly charges and those of the municipalities.

Míla referred to paragraph 591 in the preliminary draft, where the PTA had explained other issues that could possibly indicate varying competitive conditions between areas. They included issues such as marketing policy, market behaviour, service offer, quality of connections and nature of demand. In short, the PTA found no geographic variation in the above specified aspects with Míla or with the company's significant competitors.

Míla pointed out that in a country such as Iceland, where few people lived, it was normal that marketing policy, service offer, quality and nature of demand were rather homogeneous. In addition to this, Míla was subject to the non-discrimination obligation, which meant that the Míla service level was homogeneous with respect to general service and quality. This however did not at all mean that the Míla position, as an SMP operator, was the same across the whole country.

The position of the PTA

The PTA can't see otherwise than that Míla recognises here that marketing policy, service offer, and quality and nature of demand are rather homogeneous in this country. This is in accordance with PTA conclusion. The PTA has not maintained that the Míla position is exactly the same across the whole country, but rather that the difference in competitive conditions between areas is not sufficiently great to justify segregating geographic markets, but only justified varying obligations by area.

Míla referred to paragraph 593 in the preliminary draft, where it was stated that the PTA did not consider there to be reason to segment differing geographic markets in this country. Competitive conditions were not sufficiently heterogeneous between these areas. Though there was a certain difference in market structure between the two areas in question, among other things with regards to deployment of the fibre-optic networks of Míla competitors and with regards the market share, this difference was not reflected in behaviour of the Siminn Group or its competitors between these areas and is thus not passed on to consumers in the form of variations in price, quality, service offer and other aspects that should affect consumers if competitive conditions varied significantly between areas. The competitive constraint faced by Míla was thus not sufficiently different between these two areas on the relevant market to be considered significant.

Míla said that it disagreed with the PTA that competitive conditions were not sufficiently heterogeneous to segment market areas geographically. In the opinion of Míla, circumstances were on the contrary very different, which led to pricing and market share varying between areas. The existing obligations resting on Míla had however constrained Míla.

The position of the PTA

The PTA has here above, and in Section 6 in the revised analysis (Appendix A), answered this in a detailed manner to the effect that competitive conditions between the area where there is little or no competition on the one hand and an area where more competition pertains, are not sufficiently different to justify segmenting geographical markets, but only varying obligations. Reference is made to this.

Míla refers to paragraph 594 in the preliminary draft, where it is stated that in Section 10.6 and 11.5 there was discussion on whether there were nevertheless sufficient varying competitive conditions between these two areas to justify the application of varying obligations on Míla in the areas in question.

Míla stated that it was amazing that the PTA planned to employ stricter obligations on Míla when market share had dropped by almost 30% since the last analysis and in addition to this, potential share during the lifetime of the planned decision was not taken into consideration. The measures taken by the PTA with the previous decision appeared to have worked. NRAs should only consider adding obligations if the competitive situation had worsened, and it was certainly not possible to say that was the case in Iceland, quite the opposite.

The position of the PTA

The PTA states that it is not true that the Míla market share on Market 3a had in the last 6 years, decreased by nearly 30%. A correct statement is that the share decreased from 83% to 57% at the end of 2020, or about 26 percentage points in 7 years. On Market 3b, the share had only decreased from 65% to 57% during this 7-year period. The PTA has also here above, as well as in the updated preliminary draft (Annex A), endeavoured to predict development of market share during the lifetime of the analysis. Reference is made to this, but the PTA reiterates that it indicates in the opinion of the Administration, nothing other than that the Míla market share will be well over 50% on both markets at the end of the lifetime of the analysis.

The PTA also points out that subsequent to consultation on the preliminary draft and additional consultation, the Administration decided not to impose a cost analysis obligation on Míla fibre-optic, but instead decided to impose an ERT obligation. This will be further supported by arguments in Sections 10 and 11 on obligations later in this document, and in the same sections in the revised analysis (Appendix A) and in Appendix C. Although this is a lighter obligation than the cost analysis obligation, it is an addition to the obligations that now rest on Míla. The PTA however considers that, given the very substantial distribution of Míla fibre-optic network in recent years, and plans for continuing Míla development and identified potential and real competition problems on the relevant markets, that it is necessary to apply such an ERT application on Míla fibre-optic.

Míla said that in its preliminary assessment to market analysis on M3a in 2019, the PTS in Sweden had come to the conclusion that Telia was a party with substantial market share and planned to impose obligations with national coverage on the company, even though market conditions differed by geographic area. The main PTS arguments had been that Telia pricing

was the same or similar across the country. The EU Commission had on the other hand pointed out, having examined the market analysis, that Telia market share was very varied. At some locations, the company had a large market share while in other locations, the company was hardly on the market. The Commission had pointed out that Telia opportunity to abuse its power on the market was not the same at all locations, particularly where the company's market share was almost non-existent. The Commission also pointed out that the same or similar pricing on a market was not an adequate condition for the market to be deemed homogeneous or with national coverage. The Commission had therefore decided to raise serious objections to the market analysis. PTS has withdrawn the market analysis and an older decision from 2015 would apply until a new analysis came into force.

The Commission had also pointed out, that in many areas in Sweden, there was only one wholesale operator for fibre-optic. In such areas, the offer differed from other areas and demand for wholesale access could only be fulfilled by one network operator and for example supply side substitutability was not demonstrated. Market conditions thus varied, and it was therefore clear that there was a *geographic difference*.

Míla considered that the same situation existed in Iceland, if the market was examined by postcodes instead of municipalities. Míla considered that in order to demonstrate most effectively variation in the market, the PTA should examine it by postcode.

The position of the PTA

The PTA notes that the fundamental difference that exists in circumstances in this country and in Sweden is that here in Iceland, the PTA considers that there is still substitutability between copper and fibre-optic, but the PTS considers that this is no longer the case in Sweden, though a final decision on this has not yet been reached. The situation in Sweden is, furthermore, such that fibre-optic networks generally do not overlap, such that in general there is only one fibre-optic network in place in each area. In that country, the situation is widely such that Telia does not have a presence with a fibre-optic network. As in this country, there is still substitutability between copper and fibre-optic, one can in general not find areas where only one electronic communications network is on offer, that is not then owned by Míla. The PTA considers there to be not much likelihood for the situation arising in this country during the lifetime of this analysis, at least to any significant degree, that only one electronic communications network is on offer that is not then owned or under long term control by Míla. Should this turn out to be the case, then it would be very small country networks that had possibly a number of tens of connections or a few hundred at most. Such a situation would clearly have little impact on the total picture, as Míla has actually also mentioned in its comment here above, when the company discusses the countryside networks that the company has deployed with state aid, purchased or over which it has assured long term control.

The PTA has clearly explained here, as well as in Chapter 6 of the updated preliminary draft (Annex A), why the Administration considers that municipality boundaries are a more suitable and appropriate reference for selection of areas for further analysis than postcodes. Reference is made to this.

7 Geographical definition of wholesale market for central access provided at a fixed location for mass-market products (Market 3b)

7.1 The PTA Decision no. 21/2014 with respect to wholesale market for bitstream access

Míla commented on paragraph 601-609 in the preliminary draft, where an explanation was provided for the main conclusions of the PTA Decision no. 21/2014 on the wholesale market for bitstream access.

Míla said that the PTA was here discussing the conclusion of the market analysis from 2014. The main arguments for not segmenting the market geographically had been that GR had not completed its fibre-optic rollout to the whole of the Capital City Area. GR has now completed development over the whole Capital City Area, but the PTA nevertheless has come to the same conclusion, i.e., that the country should not be segmented.

Míla pointed out that competitive conditions and distribution of networks owned by parties other than Míla had totally changed, but the PTA appeared not to take this into account. Míla furthermore did not understand how the PTA considered that the SSNIP test worked. The SSNIP test was meant to assess whether a sufficient number of customers would switch service provider if the current service provider increased its prices by an insignificant amount, e.g. about 10% and thus make this increase unprofitable. It had not been and was not a question of whether users would switch between areas to switch service provider, but rather the question was whether those users that the choice had would switch service provider.

The position of the PTA

The PTA points out that geographic measures can both be in the form of segmented geographic markets and varying obligations. For one or the other measure to be worthy of consideration, competitive conditions needed to be "significantly" different between areas, but less was needed for it to be able to justify varying obligations than was needed to segment geographic markets. Widely in Europe, NRAs have commenced their procedure with respect to geographic measures by prescribing lighter obligations in areas with more competition. As the development of electronic communications networks, and competition progresses, the likelihood increases of there being a reason to segment geographic markets.

The PTA has not previously applied geographic measures in this country, neither has it segmented a market geographically nor applied varying obligations. This was not an option in the last analysis of the relevant markets in 2014, because of the extremely strong position and dominance of Míla on the relevant markets. Míla then had for example 83% market share on the market that is now 3a, and at the end of 2020 it had 57% market share. During a 7-year period, the Míla market share had thus decreased by 26 percentage points and moved from being a dominant position to being a very strong position. On the market that is now 3b, Míla had 65% market share and had 57% at end of year 2020. The Míla market share has therefore only fallen by just over 1 percentage point per annum on average over the last 7 years on that

market, so one must consider the company's position still extremely strong on that market. This development took place at the same time as GR and Tengir have implemented broad fibre-optic rollout. On the basis of information from electronic communications companies, that the PTA gathered in September and October 2020, it is likely that the main fibre-optic rollout during the lifetime of this analysis will be implemented by Míla, but more modestly by GR and Tengir.

The PTA did not embark on detailed geographic analysis of the relevant wholesale markets in its analysis in 2014. The PTA had stated there for example that it was not completed and had then still been in full swing. It had for this reason been difficult to see an area that could have been sufficiently stable to have formed a separate area for further analysis.

In this instance, the PTA conducted a detailed geographic analysis, among other things with respect to selection of areas for further analysis. As has been explained in detail here above, the PTA considers it most normal and appropriate, given distribution of electronic communication networks in this country and competitive conditions in other respects, to apply a specific objective criterion by municipality. By using among other things, a criterion on specific distribution of fibre-optic networks of parties other than Míla, those areas are categorised together where such distribution is high. Competitive conditions are furthermore, in the opinion of the PTA, not sufficiently heterogeneous between the two areas to justify segregating geographic markets, but there is reason to apply varying obligations by area.

With respect to the Mila reference to the SSNIP test for geographic analysis, the PTA refers to a previous answer here above on the shortcomings of this methodology with such analysis. Reference is made to this.

7.2 Deployment of networks, deployment plans and network topology

Míla commented on paragraph 610, where it is stated that the Míla copper network had national coverage to all legal abodes and companies in the country. Subsequent to the monopoly having been lifted, the copper system had been also improved and renewed to be able to meet increased demand for data transfer, in the first instance because of dial-up connection modems and then after that for ADSL and VDSL. Fibre-optic networks had achieved significant distribution during what must be considered a period of relatively few years. In total there are about 81% residences that have access to fibre-optic networks and the distribution to companies is also large. Because of uncertainty with regards to differentiation between the household market and corporate market, i.e., companies that did not need a quality connection, and information on the number of buildings and spaces where companies operated, precise numbers were not available for the proportion of companies with access to fibre-optic network.

Míla objected to the PTA not having been forward looking in this analysis. Míla had not and would not have a local loop system with national coverage. Míla also pointed out that the PTA recognised that the Administration's data were not reliable. The Administration did however not hesitate to use this data as a basis for obligations on Míla. Míla objected strongly to these PTA plans.

The position of the PTA

The PTA rejects that it had not been forward looking in this analysis. The revised analysis looks even further to the future than the preliminary assessment allowed for. Now the list of municipalities that belong to the category of having more competition and thus lighter obligations will be revised annually. The PTA considers this to be a much more precise method than to predict with any certainty at this point in time development over the next 3 years, with respect to among other things, distribution of fibre-optic networks and development of market share. The PTA however endeavours to also predict the likely development during the lifetime of the analysis, but such a projection cannot be more precise than the data received by the PTA in October 2020 from electronic communications companies, subsequent to a request from the PTA.

Míla has a copper network with almost national coverage and a wide reaching and growing fibre-optic network. The PTA considers it unlikely, given the Míla reply, that the company will close a significant part of its copper network during the lifetime of the analysis. Should this be the case, the PTA considers it clear that the areas where Míla will not have any network during the lifetime of the analysis will be sparsely populated and rural and will not have an impact on the total picture. In the revised preliminary draft (appendix A), the PTA has reviewed and strengthened the statistical data on which the Administration bases its market analysis.

7.3 Choice of areas for analysis

7.3.1 General

Mila commented on paragraph 638 where it was stated that in a BEREC report from 2018 on geographic analysis it was said, in discussion on selection of appropriate areas, that the large majority of NRAs had used administrative units, for example municipalities or postcodes, rather than network topology of the former monopolist incumbent and as appropriate, of their competitors as well. The reasons why administrative units were chosen were among other things, that they were considered to be clearly delineated and stable and that such units were generally small enough to ensure adequate homogeneity within each area and were sufficiently large for it to be possible to analyse competitive conditions in an effective manner without imposing an excessive burden on market players from replying to requests for data from an NRA or imposing an excessive burden on such institutions in their geographic analysis of the relevant market. Excessive analysis could be extremely time-consuming and not justifiable unless there was major uncertainty about the result. The number of areas analysed by European NRAs varied greatly, and to a certain extent depended on the size of the state in question. This was normally from several hundred to several thousand areas on which the NRAs had gathered information and analysed.

Míla rejected that precise analysis of the market was so particularly difficult that it was not possible to implement it. The PTA requested this information from parties to the market at least twice a year and therefore such an analysis should not be complicated. The PTA could

for example select areas where there was competition or areas by postcodes. Division by postcodes encapsulated various development and various pricing in wholesale.

The position of the PTA

The PTA is there referring in a general manner to specific discussion in the BEREC document in question. The PTA is not adopting the discussion as its own view. Although the geographic analysis that the PTA embarked on in this instance, was enormously wide reaching and time-consuming, the PTA considered it proper to conduct it. The PTA has explained in detail here why the Administration considered that municipality boundaries were a more appropriate and suitable reference for selection of areas for further analysis than postcodes. Reference is made to this discussion.

7.3.2 Conclusion on selection of areas for analysis

Míla commented on paragraph 661 where it is stated that the PTA planned to base selection of areas for geographic analysis on municipal boundaries. As stated in the BEREC report, there generally needed to be more than one network competitor of the potential SMP operator for it to be possible to consider that effective competition at least significant competition could exist on the relevant market. In Iceland it was generally the case that there was only one network competing with Míla in each area and it was assumed that this situation would not change during the lifetime of this analysis. Large and rather sparsely populated areas enjoyed no such competition. This competition did not derive from Míla competitors on the market in question building their bitstream service on local loop lease from Míla but was rather provided through local loops operated by other parties. As Míla used vectoring in its VDSL system, it was not impossible for Míla competitors to build their own VDSL system on Míla copper local loops and access to fibre-optic in the Míla access network was based on PON topology and this was therefore not technically impossible, at least the way things are now.

Míla pointed out that today, the company used vectoring only in the main competitive areas in the south-west corner and in Akureyri. This meant that Míla competitors in bitstream had full freedom to provide bitstream service over copper in areas outside these areas. The fact that these parties decided not to take that route was simply because they considered xDSL service not worth the outlay as consumers wanted fibre-optic service.

The position of the PTA

The PTA points out that 3 ADSL networks were operating in the Capital City Area before fibre-optic rollout commenced, i.e., Siminn itself, Hive and Íslandssími, and the latter two merged into Vodafone. A VDSL network was developed at Grundarfjörður and Snerpa developed an ADSL/VDSL network at Ísafjörður. When Míla started VDSL deployment, the company did it quickly and well and was well advanced in this development when the last analysis was conducted in 2014.

In that analysis, there was specific discussion on the problem of providing more than one VDSL operator with access to the last section of the local loop from the street cabinet to the

user, among other things because of lack of space in street cabinets and problems and costs of otherwise increasing the size of cabinets or installing more side-by-side with the ones that were already in place. There was also discussion on technical problems such as crosstalk which can increase if two VDSL providers have their equipment in the same cabinet. Crosstalk is a problem that can however arise, even if only one VDSL operator uses the cabinet. Vectoring is a technology that resolves such a problem with error correction equipment but has the limitation that in order for vectoring to work properly, only one VDSL operator can have equipment in the cabinet.

For this reason, in the last analysis, special attention was paid to these limitations of the VDSL systems and Míla was given a special exemption from providing access to part of the local loop, i.e., to provide other VDSL operators with access to local loops from street cabinet to place of use, against the provision by Míla of virtual access (VULA) on the Míla VDSL system. Open virtual access was more and deeper access than general bitstream access, which could be best compared to the party requesting access operating its own VDSL system.

There are therefore problems with facilities and technical problems to be solved with two parallel VDSL systems which may have constrained investment by others in this competition with Míla. The PTA can therefore not agree that Míla competitors had full freedom to provide bitstream service with their own VDSL systems side-by-side with Míla, as the above specified problems that needed to be resolved thus made competition between VDSL systems less advantageous than between ADSL systems.

In addition, there are specific problems in the countryside of transiting bitstream data from users at a local telephone exchange to central offices in Reykjavik, as most companies operate their technical centres in Reykjavik. These are problems that are specifically addressed in the Settlement between the Competition Authority and the Siminn Group, as Siminn is subject to obligations to provide Míla with such transit, because of its importance, and because of the problems and inconvenience for Míla itself in executing such transit for its wholesale customers. In the same way, it makes competition outside the Capital City Area uneconomic for third parties, that such a party needs himself to execute this transit from a telephone exchange at a place of use to the Capital City Area.

One also has to take into account the fact that general VDSL bitstream service from Míla has been well executed and the company has provided requesting parties with the access that has sufficed to provide homes and companies with a range of digital service. One may among other things, draw the conclusion that real demand for open virtual access, which opened a possibility for requesting parties, of deeper technical access than is generally on offer, has not seen the light of day, and requesting parties have used general bitstream access through VDSL to a great extent.

Míla commented on paragraph 663 where it is stated that the PTA planned to decide areas with more competition on the market in question by applying circumstances where a fibre-optic network was already in place which competed with Míla in the area in question and which has achieved at least 75% distribution and that the Siminn market share was below 40% on the retail market for broadband service.

Míla objected to the limits that the PTA planned to apply when categorising areas. Míla pointed out that such conditions were more stringent than criteria in other countries, as the PTA intended to use homes and company spaces, instead of homes as for example in Denmark. There was also the fact that the data PTA planned to use in the analysis was unreliable, particularly with respect to the number of companies. Míla also pointed out that the company had no control over Siminn retail and could expect Siminn to purchase bitstream service from other parties during the lifetime of the market analysis.

The position of the PTA

The PTA refers to the fact that subsequent to consultation on the preliminary assessment and to the additional consultation, the Administration decided to increase the reference limits for Siminn market share in retail from 40% to 50%. It varies across Europe, whether 40% is used or 50%. While Mila remains a Siminn subsidiary, the PTA considers it necessary to apply a specific Siminn market share in retail, as such criteria are used in Europe in almost all instances. The PTA reiterates that the Administration regards Mila and Siminn as a single economic unit in the understanding of competition law. It does not matter whether Siminn would purchase bitstream service from other parties during the lifetime of the analysis, and according to information from GR and Siminn, it is not considered that a large percentage of Siminn customers will be on the GR systems at the end of the lifetime of the analysis. The largest proportion of Siminn customers will remain on Mila systems. Among other things, because of this agreement, the PTA considers it appropriate to increase the above specified limit.

As there is generally one competitor to Míla in infrastructure in this country, the PTA considers it normal to apply a rather high distribution on such networks, i.e., 75%. The PTA therefore does not intend to interfere with this criterion.

The PTA has reviewed, and revised statistical data used in the preliminary assessment, among other things on the total number of spaces.

Míla commented on paragraph 664, where it was stated that the PTA had analysed the data in question and has come to the conclusion that the above specified two conditions were all fulfilled in the municipalities of the City of Reykjavík, Seltjarnarnesbær and Ölfus, in the GR operating territory and in Skútustaðahreppur, Svalbarðsstrandarhreppur, Grýtubakkahreppur and Tjörneshreppur in the Tengir operating territory.

Míla considered that the distribution data were wrong and objected to the use of flawed data in this analysis. A reply from the National Registry confirms this.

The position of the PTA

The PTA has revised data used in the preliminary assessment and will apply distribution as of end of 2020.

7.4 The position on the retail market, with respect to geographic analysis

Míla commented on paragraph 678 when it was stated among other things that the Míla market share on Market 3b was 59%.

Míla stated that the Míla market share on the relevant market was said to be 58% in paragraph 465 and 59% in this paragraph.

The position of the PTA

This was a typing error. In the preliminary draft the reference was market share as of mid-2019, and the PTA has now revised market share on the relevant market as of the end of 2020. The Míla market share on the relevant market was then 57%.

7.5 Assessment of homogeneity in competitive conditions in selected areas

7.5.1 Access barriers by area

Míla commented on paragraph 706 where it is stated that Míla had embarked on co-investment with GR on the one hand and Tengir on the other in a number of areas (in the Capital City Area, Borgarnes, Hvanneyri, Árborg and Húsavík) and more co-investment was on the drawing board (Reykjanesbær). It was not unlikely that such cooperation could extend to other locations in the country during the lifetime of the analysis. This would lessen entry barriers and reduce investment costs for further roll-out of fibre-optic connections and bitstream service provided through these connections.

Míla stated that the obligations presented in the draft would inhibit interest in developing fibre-optic networks in urban kernels in the countryside. The same applied also to joint development

The position of the PTA

In its preliminary analysis the PTF proposed that an obligation for cost analysis be imposed on Míla fibre-optic. Subsequent to consultation on the preliminary assessment and additional consultation, the PTA decided to retract this and prescribe instead an ERT obligation. Such a change provided the Siminn Group with additional latitude in pricing, and should nevertheless provide the Group with restraint, without inhibiting incentive for continued fibre-optic rollout.

7.5.2 Market share in wholesale and retail by area

Míla commented on paragraph 722 where it was stated that although networks had significant distribution among homes and companies in a municipality, this did not necessarily mean that uptake of service would follow. But when households and companies enjoyed limited service on older networks that were replaced with fibre-optic, there was a significant incentive for customers to change the party that provides bitstream service for the Internet connection through which they receive service. There was both the question of what company was the retailer that the consumer in question reached out to and whether that retailer was doing wholesale transactions with the relevant bitstream provider. For this reason, the PTA had also examined market share in local loop lease by municipality. There it came to light that it was precisely in such municipalities where a fibre-optic network replaced a limited copper network that Míla share had become low in wholesale of local loops.

Míla considered that here the PTA demonstrated that the selection of areas for analysis was not correct. By using postcodes, this difference in market status would have manifested itself better. Míla also considered that with the conditions that the PTA had chosen, areas would nevertheless be included as having less competition, where Míla had small market share, such as Skeiða- and Gnúpverjahreppur.

The position of the PTA

Here above, the PTA has argued in a detailed manner how the Administration considers that municipality boundaries are more appropriate and suitable references than postcodes and reference is again made to this.

With respect to Skeiða- og Gnúpverjahreppur, distribution of a network other than of Míla was 79% in that municipality at the end of 2020, while the Siminn market share is [...]%. It should also be noted that after the changes made by the PTA following additional consultation regarding criteria for areas where there is more competition, the municipality in question now falls within that area.

7.6 Conclusion with regards to geographic definition of the wholesale market for central access to mass-market products (Market 3b)

Nova agreed that the price at retail level appeared to be the same by geographic area. Nova had not expanded its market campaign outside the Capital City Area and nearby larger urban areas, for Internet service over local loop. This was among other things because of how much one had to rely on expensive trunk lines to carry the traffic, and Míla did not offer a "pay as you go" model for such service. So, one had to ensure a good market share for such a campaign to pay dividends, which meant that there was a big risk in entering such a market.

The position of the PTA

The PTA believes that the above comment from Nova strengthens the PTA conclusion that there are not significantly differing competitive conditions between areas in this country,

among other things with respect to pricing at retail level. It further came to light that Nova, like other Siminn Group competitors, thinks that the cost of trunk lines is high in this country, which are needed to reach the areas that are far from the Capital City Area. This potential problem however belongs to another market analysis, on which the PTA is working i.e., the trunk line lease market (Market 14/2004). This does however confirm the very strong Siminn Group position in the countryside.

Míla commented on paragraph 783, where it is stated that the conclusion in Section 7.6.4 was that there was some difference in the Siminn retail department by municipality. In mid-2019 Siminn had 48% market share countrywide. In the Capital City Area, the Siminn share was about [...]% while it was common that it stood at 60-70% in many places in the countryside. It was a similar story with the Míla market share, though the lower margins are generally higher than with Siminn in retail, with the exception of very small municipalities in the Tengir operating territory. For example, the market shares of Míla and GR in wholesale of next generation bitstream service were almost equal in the GR operational territory at this point in time where Míla has [...]% of the wholesale market for local loop lease against [...]% share for GR.

Míla considered it very unreasonable that Míla, which had the smallest market share over the whole GR market territory on Market 3b, was subjected to obligations, but not GR. Míla had lost 20-40% market share in a number of months subsequent to fibre-optic rollout in the area. Despite that, the PTA came to this conclusion. Míla considered it clear that the premises that the PTA used to come to this conclusion would not stand up to scrutiny and particularly with respect to it not mattering how small the Míla share was in a particular area, as Siminn retail share in Internet maintained obligations on Míla, even if Siminn moved itself over to a bitstream system of another party.

The position of the PTA

The PTA refers to the fact that the conclusion of that analysis is that there is still substitutability between copper and fibre-optic. It is furthermore the conclusion that there is no reason to segment geographic markets here in this country, but only to apply varying obligations by area. The result of this was that the PTA did not analyse the competitive situation in great detail by area, and for this reason, GR cannot have SMP in a specific area on the basis of these premises. Míla has SMP across the whole country, with 57% market share on the relevant markets. It is of no consequence that the Míla market share may be somewhat smaller in specific areas.

By the nature of things, Míla lost some market share when a new party deploys a fibre-optic network in a specific area. Anything else would be abnormal. The PTA reminds that the Míla market share at a national level has only fallen from 65% to 57% during the lifetime of the analysis currently in force, which cannot be considered significant over a 7-year period. The Míla position is very strong on the relevant markets on the basis of the market share in question and e.g., the fact that Míla and Siminn, which is the country's largest retailer, are a vertically integrated unit. In the opinion of the PTA, Míla and Siminn are thus one economic unit in the understanding of competition law. Though Siminn made an agreement with GR in July 2020, on bitstream access to the GR network, the information that the PTA has gathered from both companies does not indicate that a large number of Siminn customers will move

from the Míla system over to the GR system during the lifetime of the analysis. By far the largest proportion of Siminn customers will remain in Míla systems. The agreement came into force in late august 2021 and in all likelihood there will be a step-by-step increase over the coming years. It is not inconceivable that companies such as Vodafone and Hringdu might move their business increasingly from the GR network over to the Míla network. This would strengthen the Míla position significantly, should this happen in large numbers.

Míla commented on paragraph 784, where it is stated that market share had not changed significantly at the above points in time at retail or wholesale level. The PTA does not expect that this will change much in the lifetime of the analysis.

Míla said that here there seemed to be no analysis, or the data had not been used to come to this conclusion. Data and the Míla projection gave on the other hand quite a different conclusion.

The position of the PTA

Subsequent to consultation on the preliminary assessment, the PTA gathered further data from the electronic communications companies in order to be able to better predict development during the lifetime of the analysis. This went well, except that data from Míla, among other things with respect to expected distribution of fibre-optic in the coming years, were not precise. This means that it is significantly difficult for the PTA to predict development with any certainty, but it is nevertheless the assessment of the PTA that it is very unlikely that it will be anything other than that the Míla market share on the relevant markets will remain over 50% at the end of the lifetime of this analysis. The PTA will furthermore review the list of municipalities classified as having lighter obligations, during the lifetime of the analysis. This is a more precise methodology, which captures real development, than to trust a projection long into the future, when data from the electronic communications companies is not sufficiently precise, as is this case, and where there are many imponderables.

Míla commented on paragraph 789, where it was stated that Míla wholesale prices on copper networks on the relevant market were level across the country, subsequent to price control obligations that were imposed with PTA Decision no. 21/2014. On the other hand, the Míla wholesale prices for fibre-optic on the relevant market varied to a small degree between urban and rural areas, about 16-30%, but no obligation was in force on price control. It is likely that it would also be the conclusion with respect to Míla copper if the above specified price control was not in place. It was the assessment of the PTA that the Míla price difference in question could be explained by varying underlying costs, among other things because of varying deployment costs, and because of varying economy of scope between urban and rural areas, rather than by varying competitive pressure between these areas.

Míla pointed out that paragraphs 745-795 were part of Section 7.7 which bore the title "Conclusion with regards to geographic definition of the wholesale market for central access to mass-market products (Market 3b)". A large part of the discussion of the Section appears however to deal with circumstances on the local loop market, i.e., Market 3a instead of Market 3b, which the analysis should however discuss.

These paragraphs were simply wrong. There was a significant price difference between the countryside and Míla competitive areas for bitstream over GPON, and also in fact on local loops. In this way, the price for bitstream in the countryside was about 80% higher than in competitive areas. Míla considered that the PTA was not correct in saying that the price difference was not significant. Míla asks how high the price difference needed to be high, for it to be significant. The price difference resulted from varying competitive conditions, and also from varying costs in providing the service, as a large part of the costs was fixed, which means that the number of users is very important.

The position of the PTA

With respect to the Mila comment that a large part of Section 7.7 appears to deal with circumstances on Market 3a instead of Market 3b, which the section should however discuss, the PTA notes that there is a significant similarity between the above specified markets, and that it was not for no reason that the ESA had prescribed that they be analysed in parallel. The PTA rejects, however, that this is a case of precisely the same discussion. The discussion is transposed to Market 3b where appropriate. This means that this is not the same discussion or the same analysis, although reference is widely made to Market 3a in the reference sections, which is natural.

In paragraph 789, there is discussion on the wholesale price of fibre-optic, and there the discussion might be more precise when reference is made to proportional difference in wholesale price between areas and this has been improved. The fact of the matter is on the other hand, that the service that the large majority of electronic communications companies are purchasing from Míla is fibre-optic local loop with bitstream in Access Option 1. Míla sells a very small quantity of fibre-optic local loops ([...] local loops) without bitstream and the Míla bitstream is thus most frequently sold with local loop. In the following table one can see a more precise elaboration of the current Míla tariff, which came into force in September 2020, and the percentage difference between these prices:

Area	Fibre Local Loop Access Option 1		Access Option 3	Fibre Local Loop with A1	
Capital area and Akureyri	2,120 kr	960 kr	1,337 kr	3,080 kr	
Rural	2,480 kr	1,600 kr	1,977 kr	4,080 kr	
Difference in %	17.0%	66.7%	47.9%	32.5%	

As one can see in the table, the price difference in this most common Míla product is now 32.5%.

And the sale of Míla of bitstream without local loop is also very limited with Míla, and the number of fibre-optic local loops that Míla leases from other network operators, for its own active equipment was [...] in mid-2020. This is however considerably more than the number of sold local loops without bitstream. The price difference between bitstream service without local loops is significantly more between areas, particularly in Access Option 1, i.e., about 66.7%.

In a reply from Míla, dated 22 September 2020, to a query from the PTA, it was stated that this difference in the price for bitstream between areas could be explained by costs, as the usage of bitstream equipment was very small in the countryside, and in addition to this there were additional costs because of location. The PTA considers it therefore clear that this price

difference between areas is explained first and foremost by varying cost structure, and not because of significantly differing competitive conditions.

Míla commented on paragraph 792 where it was stated that in the opinion of the PTA, the price difference between Telia and local networks in Sweden was much greater than was normally the case between Míla and local networks in this country, and in addition, the importance of local networks was considerably less in this country than in Sweden. Only a few percent of households and companies in this country used such underlying networks against tens of percentage points in Sweden. The Telia market share in Sweden was only 37% nationwide, while the Míla share was 63% in this country. This case was therefore in no way comparable in the opinion of the PTA.

Míla pointed out that the PTA appeared to be comparing Telia market share of fibre-optic with Míla market share in the whole local loop market, i.e., copper and fibre-optic market. The correct figure was that Míla had about 30-35% market share in fibre-optic, while GR had about 60-65%. In Sweden, Telia on the other hand, was the largest party on the market with 37%. If anything, the Míla position was worse than that of Telia, as Míla was not the largest party on the market as in Sweden and for this reason Míla considered it clear that more stringent obligations than in Sweden should not be imposed here.

Again, the PTA appears not to include the networks of GR and Tengir as local networks. These networks are to a great extent similar to fibre-optic networks of municipalities in Sweden, as they are largely owned by municipalities.

Míla also considered that circumstances in these countries were very similar with respect to how end users perceived fibre-optic and xDSL, and there the PTS had come to the conclusion that fibre-optic was a separate market. The PTA had come to this conclusion by conducting a user survey where people were asked why they had chosen the network they were using. The conclusion was that people chose fibre-optic services in order to achieve higher speed, less delay on data and a lower fault frequency. The PTA had not conducted any such survey in the draft. Míla considered that such a survey was very important to analyse the market and was in fact relatively easy to implement.

The position of the PTA

With respect to the Míla reference to circumstances in Iceland and Sweden being very similar as to how end users perceived fibre-optic and copper networks, and that PTS in Sweden had conducted a consumer survey and PTA had not, one can say that subsequent to consultation on the preliminary draft, the PTA decided to commission a detailed consumer survey. Its conclusion strengthens the PTA position that there is still substitutability between these technical solutions in this country. Reference is made to Sections 3 and 4 here above, to the same sections in Appendix A, which contain a revised analysis of the relevant markets and to Appendix C, where the PTA explains its position to the various comments on this issue that were received in the additional consultation which the PTA opened on 30 October 2020.

The PTA does not fully understand the Míla comment that the PTA appears not to consider the networks of GR and Tengir to be local networks. The networks in question are clearly local. Tengir does not aim to distribute nationwide, while GR says that it does, though that will not happen during the lifetime of this analysis according to GR replies to a query from the PTA. It is clear that GR and Tengir networks are much larger than the local networks of the municipalities in the countryside at various locations across the country, most of which have been deployed with state aid. Specific obligations, as a matter of course, also apply to the small state-supported countryside networks pursuant to ESA guidelines on state aid.

Míla commented on paragraph 794 in the preliminary draft, where it was stated that the PTA did not consider there to be reason to segment differing geographic markets in this country. Competitive conditions were not sufficiently heterogeneous between these areas. Though there was a certain difference in market structure between the two areas in question, among other things with regards to deployment of the fibre-optic networks of Míla competitors and with regards to the market share, this difference was not reflected in behaviour of the Siminn Group or its competitors between these areas and is thus not passed on to consumers in the form of variations in price, quality, service offer and other aspects that should affect consumers if competitive conditions varied significantly between areas. The competitive constraint faced by Míla was thus not sufficiently different between these two areas on the relevant market to be considered significant.

Míla pointed out that the PTA appeared to ignore that there was a difference both in service and price between these areas, and furthermore a difference in competitive conditions, i.e., areas without competition and areas with competition. There was furthermore a difference as to whether Míla had an underlying network on Market 3a. Míla rejected this conclusion and considered it to be incorrect.

The position of the PTA

The PTA has here above answered this in a detailed manner to the effect that competitive conditions between the area where there is little or no competition on the one hand and the area where more competition pertains, are not sufficiently different to justify segmenting geographic markets, but only to justify varying obligations. Reference is made to this.

8 Conclusion on SMP on the wholesale market for local access with fixed connection (Market 3a)

8.1 Introduction

GR supports the PTA intention to maintain designation of Míla as having SMP on Market 3a.

The position of the PTA

The GR opinion accords with the PTA conclusion on SMP.

Tengir makes no comment on the PTA intention to maintain designation of Míla as having SMP on Market 3a.

The position of the PTA

The Tengir opinion accords with the PTA conclusion on SMP.

Nova considers it to be clear that although the Míla market share has declined since 2014, the situation remained such that Míla (and the Siminn Group) had SMP, which had strengthened significantly from and including the year 2018. Nova therefore wholeheartedly agreed with the PTA opinion that there were very strong indications that Míla had SMP on the relevant market. Míla controlled a network with national coverage, which competitors had to rely on to provide service. There had furthermore been very substantial and rapid rollout of fibreoptic in areas where there had however been some competition, which demonstrated undeniably that the company enjoyed a very strong position on the market and was very much on the ascendency.

In addition to this, Míla had the advantage of having Siminn as a dependable customer that bundled many kinds of electronic communications and media services and offered various free offers in order to gain customers on the retail market, partly in an unlawful manner, see Competition Authority Decision no. 25/2020. In addition to this, Míla appeared to have adequate funds, particularly for development projects in areas where there could however be competition.

Nova therefore supports the continued designation of Míla as a company with SMP and that obligations be imposed.

The position of the PTA

The Nova opinion is in accordance with the PTA conclusion that the situation is still that Míla (and the Siminn Group) enjoy SMP, despite the fact that Mila's market share has declined in recent years. Síminn's market share, however, has not decreased to the same extent.

Míla states that it had been the preliminary PTA assessment that Míla was deemed a company with SMP across the whole country, both on Markets 3a and 3b. Míla had in a detailed manner here above, discussed the limitations that the company believed to be to the analysis that was the basis for this PTA preliminary assessment.

In the first case, Míla did not agree with the preliminary assessment position that the service markets for 3a and 3b should be defined such that they covered both copper networks and fibre-optic networks. By defining the market in such a broad manner as the PTA does, the Míla market share was significantly overestimated for 2019 (and furthermore implied that the position would continue to be the same during the years 2021-2026). If the market was defined as solely for fibre-optic, then the Míla market share would be far smaller, about [...]% at a national level at the end of 2019 and [...]% if one took into account the areas where GR and Tengir operated.

In the same way, the PTA significantly overestimated the significance of Míla being the only company with a "distribution system with national coverage", as the Míla fibre-optic system was far from having national coverage. Furthermore, the Míla copper distribution system with national coverage provided insignificant competitive restraint. Apart from that, one had to take into account the fundamental fact that a distribution system "with national coverage" had no meaning with respect to providing electronic communications service in individual areas, i.e., that access to the system was not necessary and could therefore not be considered a criterion for market power. This was not a case of an uninterrupted chain.

Secondly, the PTA had not taken adequately into account the significantly differing competitive conditions that existed, and that would foreseeably continue to exist between areas where there was a fibre-optic network on the one hand and on the other hand, where there was none. As discussed here above, the area in question, where there were at least two competitors, covered about 71-90% of the country's households. In the same areas, Míla was generally the smaller operator today and there was nothing that indicated otherwise than that this would continue to be the case during the lifetime of the analysis (2021-2026). Nor could one understand the PTA preliminary assessment in any other way than that the Administration agreed with this Míla position.

The position of the PTA

In Section 8.1 in the PTA preliminary draft, it is stated that in accordance with the ESA guidelines on market analysis the relevant service market and geographic market were defined and that the next step was to analyse competition in the light of the factors that influence market power, and to find out whether a company has market power to the degree that it should be designated as a company with SMP and that obligations should be imposed on that company.

In this regard, market share, financial strength of market players, entry barriers and competition on the relevant market are among the aspects that are taken into account. Aspects such as sales and service systems; whether the electronic communications company in question can offer varied service to the same customers by way of access to a broad product offer; electronic communications networks etc., are also important.

The Mila criticism is based on the premise that the market should be solely defined on the basis of it being a wholesale market for fibre-optic local loops. It is however the conclusion

of the PTA, as stated in the sections here above, that there is substitutability between copper and fibre-optic local loops. In this connection, reference is made to Sections 3 and 4 here above, to the same sections in the revised analysis (Appendix A) and to Sections 2 and 3 in Appendix C, where there is discussion on the conclusions of the additional consultation opened by the PTA on 30 October 2020.

The PTA points out that despite significant decommissioning of copper local loops, there are still more customers of the Siminn Group that have copper local loops than those that have fibre-optic local loops. At the end of 2020, the proportion of sold Mila fibre-optic local loops was about [...]% while corporate connections were about [...]%.

It is clear that service over copper local loops still has significant financial weighting in the Míla and Siminn service offer. The PTA indicates the fact that no distinction is made in Internet connections or their marketing by Siminn on the basis of whether they are xDSL or fibre-optic connections. This applies both to supply and pricing in retail across the whole country, which supports the conclusion that there is substitutability between copper and fibre-optic networks on the relevant wholesale markets and related retail market. The same can be said about the second largest service provider, Vodafone, as well as almost all other providers in this country. In accordance with the above, the Míla assertions do not hold, given the actual actions of the Group.

The PTA reiterates that the market being examined here is the wholesale market for local access provided at a fixed location, and the market is defined as being technically independent. As is stated here above, the relevant wholesale market here under discussion is defined as one geographic market and this analysis takes this conclusion into account. With respect to this conclusion, reference is made to Section 6 here above and to the same section in the revised analysis (Appendix A).

The PTA reiterates that the Administration defines the market, such that it covers both copper and fibre-optic local loops, which means that the Míla calculation of market share does not apply, as the company attempts to only discuss market share on an alleged separate market for fibre-optic local loops. Míla market share was 57% at the end of 2020 and the development is towards fibre-optic local loops increasingly replacing copper local loops as time goes on, but this will in the PTA opinion not have a significant impact on market share during the lifetime of this analysis, i.e. during the next 3 years or so, as it is considered to be clear that most investments in fibre-optic will be made by Míla, given the information PTA gathered from electronic communications companies in the autumn of 2020.

The PTA points out that the Míla text in paragraphs 110-112 in comments from the company, dated 10 July 2020 is largely the same as the text on page 16 in Section 5.1 in the Analysys Mason (AM) report dated 1 July 2020, which the company prepared for Míla.

Míla referred to paragraphs 801 and 804 in the PTA preliminary draft and said that the company's access network was no longer mostly based on a copper network with national coverage. The copper network would not have national coverage during the lifetime of the analysis (and did not have that today). The Míla fibre-optic network was in many more locations than in the Capital City Area. This was a strange analysis of the situation. Míla serviced local loops owned by other parties in a limited manner, but widely offered bitstream

service. Subparagraph 129 contained incorrect information. Míla did not have a fibre-optic network in Hvalfjarðarsveit and Míla did not provide GPON service on the Líf í Mýrdal fibre-optic network, if the reference Mýrdalur indicated that network.

Copper local loops did not reach all inhabitants of the country. In recent years, Míla has only deployed fibre-optic in new areas, which means that there were no copper networks there. The Míla copper network did not have national coverage with respect to broadband connections. Large areas could only use copper local loops for PSTN service.

The position of the PTA

The PTA text in the preliminary draft states: "Mila access network is mostly based on a copper local loop network with national coverage, and the company has in addition to this deployed fibre-optic local loops in recent years to a significant degree in the Capital City Area."

This is a misinterpretation by Míla of the wording of the paragraph in the opinion of the PTA, and therefore no reason to specifically reply to this. The PTA does however refer to its previous answers with respect to the Míla electronic communications network, in the form of copper and fibre-optic networks, in Section 6 here above.

The PTA will however edit footnote 129 in the draft (now footnote 149 in Appendix A) because of the Míla comments on Hvalfjarðarsveit and Líf í Mýrdal, but this is not an exhaustive list.

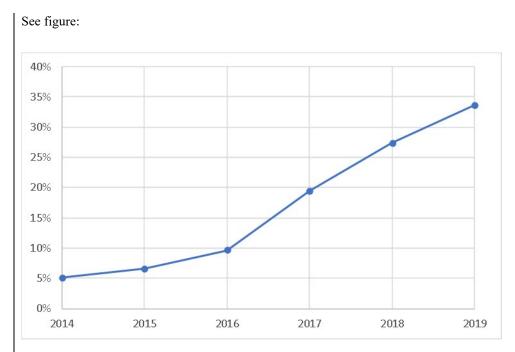
8.2 Market share

GR agrees with the PTA views with respect to Míla dominant market power. GR considers that there is nothing to indicate that the Míla market share will diminish to any significant degree during the lifetime of this analysis, such that this would have a significant impact on the company's market strength and dominant position on Market 3a or 3b. Míla has rather increased its effort with respect to deployment of fibre-optic networks, and it is therefore clear that the company intends to strengthen its position technically and thus its market power.

The position of the PTA

The GR opinion is in accordance with the PTA conclusion on the Míla dominant market power and that there is no likelihood that this will change significantly during the lifetime of the analysis.

Míla also mentioned that it was clear in those areas where two fibre-optic networks were in place, that the Míla share in fibre-optic was low. In the previously referenced report, AM estimated on the basis of available information the GR customer share in fibre-optic, and the Míla customer share that did not purchase fibre-optic, and it was in this manner that the Míla share in fibre-optic was estimated in both areas where GR and Tengir were operating. The information in question indicated that Míla had less than 35% share in the relevant areas.



Source: Míla.

In the Analysys Mason report, pages 4-6 in Section 2.3, it was stated that AM considered the Míla share in FTTH to be those areas where there was competition on FTTH access. By subtracting Míla's own figures on number of customers with FTTH connections from the total numbers published in the PTA statistical reports, one could assess the size of GR and Tengir at a national level. One can also use market shares from the same PTA report. In this way one could assess the Míla share in those areas where there was competition and AM assessed the share which is seen in the above specified graph.

AM had specifically mentioned that Míla growth was almost entirely because of Siminn customers that moved their connections from VDSL over to FTTH.

The position of the PTA

The PTA reiterates that the Administration comes to the conclusion that there is still substitutability between copper and fibre-optic networks and connections on such networks. The relevant wholesale markets comprise therefore both of them. This means that there is not a separate fibre-optic market in this country, nor segmented geographic markets. The PTA points out that despite GR having deployed fibre-optic local loops to all homes in Seltjarnarnes some 12 years ago and that Mila had commenced fibre-optic deployment there to a significant degree in recent years, there are still about [...]% of internet connections there over copper in end of 2020. It is clear that not all customers of internet service providers have seen the need to switch from the company's underlying copper network to service over fibre-optic local loops, which strongly indicates that it is factors other than capacity of underlying networks that decide consumers decision to purchase and that substitutability still exists between copper connections and fibre-optic.

The PTA considers that Míla has achieved good and fast results on its fibre-optic network, given that the company did not commence this development to any significant degree until 2016. Given information from Míla, the company will implement continuing vigorous fibre-optic rollout throughout the lifetime of the analysis and doubtless longer. Siminn has

furthermore achieved very good results on the retail market in sale of connections over fibre-optic network and has become the largest party on the market there and continues to have a dominant position in the sale of connections over copper network, i.e., 77%. Here below one can see a table and figure that show market share on the retail market for sale of connections over fibre-optic network in mid-2020, and this figure was published in the above referenced PTA statistical survey for the first half of 2020, which was published on the Administration's website last 18 December:

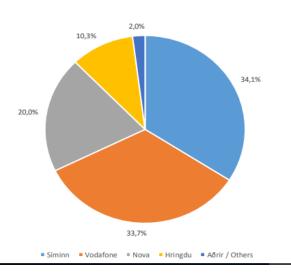
Tafla 29. Fjöldi ljósleiðara internettenginga*

Table 29. Total fiber internet connections*

	Fjöldi Number			Markaðshlutdeild Market share				
Í lok tímabils / End of	1H 2018	1H 2019	1H 2020	1H 2018	1H 2019	1H 2020		
Samtals / Total	63.619	80.787	91.221	100,0%	100,0%	100,0%		
- Síminn	14.044	24.327	31.099	22,1%	30,1%	34,1%		
- Vodafone	31.580	32.885	30.706	49,6%	40,7%	33,7%		
- Nova	9.406	13.913	18.214	14,8%	17,2%	20,0%		
- Hringdu	7.199	8.084	9.373	11,3%	10,0%	10,3%		
- Aðrir / Others	1.390	1.578	1.829	2,2%	2,0%	2,0%		
*Ljósleiðari að heimili eða byggingu. / *Fiber to home or building.								

Mynd 29. Markaðshlutdeild skipt eftir fyrirtækjum

Picture 29. Market share by companies



There it is stated that the Siminn market share in fibre-optic was 34.1% in mid-2020 but was only 22.1% two years before. At the same time, the Vodafone share fell from 49.6% to 33.7%. The Siminn Group can therefore be quite happy about this, regardless of whether one looks only at connections over fibre-optic or at connections over copper and fibre-optic.

Míla referred to paragraph 820 in the PTA preliminary draft where the PTA considered that the best way to give a realistic picture of the position and strength of parties on the local loop market was to use the number of connections in use as a basis for calculating market share in wholesale, rather than turnover figures. For this, there were two main reasons. The first was

that the two largest companies on the market (Míla and GR) used different approaches in their service offer and business relationship with users. Míla sold access to local loops without active equipment in the copper network. In the fibre-optic access network, access to the local loop in the PON network was technically difficult because of the network topology, as such a local loop was a very short distance from the kerb and there were few users connected to each well. GR sold general access to local loops with broadband access. The second reason was that it was difficult to examine internal sales, particularly with GR and other smaller provider companies. This required estimating turnover in wholesale from estimated information and such calculations were subject to uncertainty. Given the above, it was the PTA conclusion to use the number of connections as a reference in calculating market share on the wholesale market as this was a more exact metric than estimated turnover figures from income from internal sales in wholesale.

Míla objected to these this position taken by the PTA. *Firstly*, there were two markets (3a and 3b) and it should be easy to get information on turnover figures. GR has completely separate tariffs, on the one hand for local loops and on the other hand for bitstream service. It should therefore not be difficult for GR to provide information on turnover. The PTA should have information on current prices of GR and other parties, and on quantities and discounts. It should not then be difficult to calculate turnover, and roughly calculated it would be about ISK 2 billion per annum, with VAT, if one allowed for GR having 55,000 connections.

On the other hand, it could not be a significant reason that companies other than Míla did not fulfil their statutory provision of information to the PTA. Is clear that the price of copper local loops was only about half of the price of fibre-optic connections of GR or Tengir. Míla therefore considered there to be logical arguments for the PTA using turnover on the market, as is generally done on market analyses and had been done in prior market analysis of local loop and bitstream market. Míla considered that the PTA had adequate enforcement tools to require this information from companies on the market. In the light of the fact that Míla interests in this matter were significant, the company considered that the reasons given by the PTA for using quantity rather than turnover did not carry much weight.

The position of the PTA

Quite contrary to Míla assertions, there is a long tradition with the PTA and other sister institutions in Europe of applying the number of units rather than revenue in market share in wholesale, particularly when there is a high proportion of internal sales and varying factors governing service offer. This, among other things, applies to the relevant market here under discussion. The PTA assesses in each instance what the need is for gathering appropriate and adequate information. It is not true when Míla says that in prior market analysis on the local loop and bitstream market the PTA had applied turnover figures, as the truth of the matter is that the PTA also applied quantities in the last market analysis of the relevant markets, see PTA Decision no. 21/2014.

Míla's conclusion that companies other than Míla do not meet their statutory provision of information to the PTA, is incorrect. Other companies that own fibre-optic local loops are not subject to obligations to separate their bookkeeping between local loops on the one hand and broadband connections on the other. Some of these companies, such as GR, choose to sell most of the connections in the form of broadband access and are not obliged to specifically record internal sales in local loop access. For this reason, the information that Míla considers

that should have been gathered, does, in many instances, not exist. GR does not operate on the market for local loop lease to any significant degree, and nor is the company obliged to separate its sales of products, revenue centres or cost centres in its bookkeeping, by local loop or bitstream. It is therefore not properly thought through in the Siminn comments that GR access charge can be interpreted as being entirely for local loop lease and wholesale revenue from access of electronic communications companies as entirely for bitstream.

Míla refers to paragraphs 826 and 827 in the PTA preliminary draft, where it was stated that it could be said about companies' market share on the local loop market that it was characterised first and foremost by two salient factors. On the one hand there was the strong position of Míla on the market and on the other hand there was the high concentration on the market (HHI index 0.488). The development had tended towards declining Míla market share, particularly in the light of the GR development, but this development was solely in specific areas in South and West Iceland and there was uncertainty about future GR development compared to current scheduled development. This was clearly an oligopoly market, and it was not realistic to expect this position to change in the coming years. The PTA furthermore expected the GR local loop network to continue to grow in accordance with company plans, particularly with regards to its strong position on the wholesale market. The PTA however did not expect the changes to be such that they would threaten Míla's strong market position during the period of validity of the analysis with reference to the available company plans, though the gap between them may shrink somewhat.

Míla said that this indicated that geographic segmentation was needed. Competitive conditions differed by geographic area and it should also be specifically investigated whether GR had SMP, either jointly with Míla or as a single company. There were indications that the GR market share was already greater than that of Míla, or about 50% in mid-2019, and would be even more during the lifetime of the analysis. The PTA needed to make a future projection expressed in numbers, as it seemed that the Administration took the status in mid-2019 and then drew conclusions from that but made no statistical model. This is not acceptable in the opinion Míla.

The position of the PTA

The PTA reiterated that the Administration defined the market, such that it *covered both* copper and fibre-optic local loops. The PTA furthermore defined the relevant wholesale market as one geographic market, and the analysis is based on that.

The Míla market share was 57% at end of year 2020 while GR had 36% share and the development tended towards fibre-optic local loops increasingly replacing copper local loops, but this will not in the opinion of the PTA have a definitive impact on market share during the lifetime of this analysis. The Míla market share had declined by about 3.7 percentage points per annum on average during the last 7 years. Given continued unchanged development in the coming years, it is possible to conclude that the Míla share will fall below 50% during the lifetime of the analysis. There are however indications that the decline in Míla market share may decrease in the coming years, among other things because Míla fibre-optic distribution plans are more ambitious than those of GR, Tengir and other parties. It is furthermore clear that GR uptake is much lower in areas where the company is now in joint civil works with Míla, e.g., in Árborg and Reykjanesbær, than the company was accustomed

to when it pioneered fibre-optic rollout. It is also possible that companies such as Vodafone and Hringdu will increasingly move from the GR network during the lifetime of the analysis. The PTA therefore does not consider it likely that Mila's share will fall below 50% at the end of the lifetime of the analysis.

The PTA stands by its assertion on the strong Míla position on the market and on considerable concentration on the market, see *HHI index*¹¹0.488. This is an oligopoly market, and it is not realistic to expect this position to change in the coming years.

The PTA uses among other things, historical development and projections of companies on the relevant market in each instance, but has not published this in all instances, among other things, for reasons of confidentiality. The Administration plans to further develop a projection model for this purpose.

8.3 Total size and profitability

Míla pointed out that GR, which owned the largest fibre-optic system, both if one considered the area in which it now operated and also at a national level, was a single economic entity with its parent company Orkuveita Reykjavíkur ohf. (OR), which was then in 100% ownership of municipalities, of which 90% owned by the City of Reykjavík. There were no restrictions on using support service or on independence of board members in the subsidiary. This company group also had enormous economic strength, among other things in the shelter of monopoly. On the other hand, Míla and its parent company Siminn were bound by significant conditions by the Competition Authority, for the purpose of mitigating the companies' vertical integration. At the same time, Míla strongly objected to the discrepancy between how the PTA compared economic strength of these companies/groups.

The position of the PTA

As is stated in the PTA preliminary analysis, GR is fully owned by Orkuveita Reykjavíkur (OR) which is a public sector company mostly owned by the City of Reykjavík. OR is financially very strong in comparison with the above specified electronic communications companies. It should however be noted that, according to Article 36 of the Telecommunications Act, GR shall be separated financially from other OR operations such that it is equivalent to an unrelated company and care should be taken that competitive activities such as GR operations are not subsidised by other operations or are operations which enjoy monopoly or special rights in fields other than electronic communications. The PTA has the role pursuant to the law, to monitor that electronic communications operations are financially separated from utility operations which enjoy monopoly or special rights in other fields than in electronic communications, and the PTA has for this purpose, imposed various obligations on GR in recent years.

¹¹ Herfindahl-Hirschman Index. The value of the index lies between 0-1. The higher the value the greater the concentration on the market. If the result is less than 0.1 then action is considered unnecessary. If the result is in the range of 0.1-0.18 then there is average concentration and over 0.18 there is significant concentration.

The assessment of the PTA is stated to the effect that GR does not enjoy in a direct manner the financial strength of its owner more than other electronic communications companies from their owners, e.g., from pension funds which are the main owners of Siminn and Sýn. In the opinion of the PTA, the deviations that the PTA has reported regarding the financial separation of GR from OR cannot be considered significant.

Míla refers to paragraphs 835-839 and the PTA preliminary draft, where there was discussion on comparison between financial key statistics according to the annual reports of the main companies on the Icelandic electronic communications market, which demonstrated financial strength of the Siminn Group above and beyond that of other companies on the electronic communications market.

Míla noted that in the Míla figures, there were sales to Siminn. If this were removed, Míla revenue from external parties was smaller than GR revenue. It was not reasonable to compare the Siminn Group with GR. It would be more reasonable to compare the Siminn Group with OR, as GR was 100% owned by OR. It should be noted that if one was comparing e.g. financial strength, then it should not matter whether the parent company was in electronic communications operations or not. It was not possible to ignore the dominant position occupied by GR, having OR as a backer, which was in a monopoly position and furthermore in public ownership. It was appropriate to note that a large part of Siminn revenue was not from Markets 3a and 3b. If the PTA considered it normal to only compare the items related to electronic communications service, then one should only compare income from these items that related to Markets 3a and 3b. This was a fundamental issue.

The position of the PTA

The PTA points out that the discussion is about total size and profitability which shows the strong position of Siminn and Míla as a Group above and beyond competitors on the electronic communications market. This is based on information according to annual financial reports of the companies in question. This is detailed information that has previously been published in the PTA analysis and the Administration intends to develop the comparison even further.

The PTA will regularly revise information in the Sections with reference to 2019, and the position of the Siminn Group strengthened between the years 2018 and 2019.

The PTA does not consider the connection between OR and GR to be comparable. Simina and Mila have vertically integrated operations on the electronic communications market, while OR and GR are not operating in the same sector. The PTA furthermore considers that it is not possible to only take into account performance related to Markets 3a and 3b, among other things because of how the service offer of the Siminn Group in all areas of electronic communications is varied and interwoven.

Míla referred to paragraph 841 in the PTA preliminary draft where it is stated that according to Article 36 of the Telecommunications Act, the operations of GR should be separated financially from other OR operations such that it is equivalent to an unrelated company and care should be taken that competitive activities such as GR operations were not subsidised by

other operations which enjoyed monopoly or special rights in fields other than electronic communications.

Míla pointed out that according to the Settlement with the Competition Authority, the same applied to the Siminn Group. The following is stated in Article 2 of the Settlement:

"In order to support increased competition, non-discrimination, transparency and credibility on electronic communications markets, the company shall continue to ensure full separation of electronic communications networks and facilities of the Group from other operations of the Group as was the intention when Míla was founded in 2007 and prescribed in the Competition Authority Decision no. 6/2013."

In article 4 of the Settlement, it was stated that Míla should be operated as a separate legal entity and should be separated in terms of management and operations from parent and sister companies, and that the board members should be independent of Siminn.

In article 5, it was stated that the Mila commercial policy should be conducted independently and on the basis of normal profitability requirements, but that the parent company was however authorised to work on policymaking for the Group.

On the other hand, GR enjoyed all support service from OR, and in the OR 5-person board there were 3 employed by OR and one former employee of OR. Both deputy board members of GR were furthermore employees of OR. There was much greater separation between Míla and Siminn than between GR and OR. Míla considered, OR and GR to be one economic entity with huge financial strength.

The position of the PTA

The PTA considers there to be no grounds for drawing a parallel between Siminn and Míla on the one hand, as companies with SMP, according to the preliminary draft market analysis, and on the other hand OR and GR which are covered by article 36 of the Electronic Communications Act. The dominant position of the Siminn Group, with respect to financial status and operations on the electronic communication market is clear, no matter how one looks at it. The PTA considers that the Competition Authority Settlement in question with the Siminn Group, cannot cause Mila to be deemed not to have SMP on the relevant market. Competitors of the Siminn Group have maintained that the Siminn Group has repeatedly breached the provisions of the Settlement in question, and in fact the Competition Authority came to the conclusion in its Decision no. 25/2020, that the Group had breached specific provisions of the Settlement, and furthermore, a number of cases are under review at the Competition Authority that could constitute breaches of the Settlement. The Competition Appeals Committee, however, came to that conclusion in case 1/2020, dated 13 January 2021, that that part of the CA's decision should be annulled due to formal defects in the investigation of the case, but concluded that Siminn had seriously violated the Siminn Group's other agreement with the CA from 2015, through illegal bundling. These issues are discussed in more detail in Section 10.2 of the updated preliminary draft (Appendix A), which deals with competition problems. The PTA also refers to the reply to the comment immediately here above, with respect to vertical integration on an electronic communications market, which exists in the case of the Siminn Group, but not with OR and GR.

Míla states that the PTA has not mentioned that the Administration had failed to note that GR had breached PTA conditions on funding, and that this had not come to light until after GR had enjoyed this support for development for many years. In this manner, GR precisely enjoys the strength of its owner. No penalties have been imposed on GR for the breach, and it was not clear how compliance surveillance was in fact organised by the PTA. GR had thus been able to enjoy the gains of infringing the law and PTA decisions.

The position of the PTA

The PTA rejects the Míla assertion that the PTA had failed to note that GR had breached the PTA conditions for the company's funding. The PTA refers among other things to its Decision no. 3/2019 "Implementation of financial separation at Gagnaveita Reykjavikur ehf. for the years 2016-2017". The decision is part of the PTA surveillance of the implementation of financial separation of GR within the OR Group on the basis of article 36 of the Electronic Communications Act. The investigation covered the period 2016-2017 and was based on bookkeeping and operations data for these years. It is the main conclusion of the PTA that financial separation between OR and GR was in accordance with the provisions of article 36 of the Electronic Communications Act, with the exception of the provision of a loan to GR in connection with a cash pool of the OR Group. The PTA also commented on the conditions of credit institutions in loan agreements with GR with respect to OR ownership of GR. The PTA therefore considers there to be no reason to impose obligations on GR for implementation of financial separation between OR and GR with respect to the above specified issues in the above specified decision. In other respects, the PTA refers to detailed replies on this issue in this document.

8.4 Entry barriers

8.4.1 General comments on barriers to entry

Míla specifically rejected that circumstances on the market had a special meaning in this connection, such as alleged access barriers, vertical integration, etc., and that they were in some way conducive to supporting the PTA preliminary assessment that Míla is deemed to have SMP on the relevant markets across the whole country.

The position of the PTA

As stated in the PTA preliminary draft, the entry barriers that confront companies on the relevant market are on the one hand to a large extent attributable to the strong position of the Siminn Group, of which Míla is part, and on the other hand to difficulties encountered by new electronic communications companies in creating the infrastructure they need to be able to compete on the market. The former category includes control of infrastructure that is difficult to duplicate, economy of scale, economy of scope, access to capital and vertical integration. The latter category can inter alia include sunk costs, restrictions to growth and costs for service systems.

As the PTA has come to the conclusion that there is no reason to segment geographic markets, a party designated as having SMP has such status across the whole country.

Siminn said that the PTA maintained that there were non-transitory entry barriers on the markets in question, i.e., Markets 3a and 3b. The PTA analysis on the other hand, contains discussion of a general nature and assertions that are not adequately supported by data. No distinction is made between the differing circumstances that now pertained at many locations across the country, nor are arguments supported by statistical assessment as grounds for assertions on access barriers.

Siminn pointed out that there were significantly differing circumstances for entry of parties to the relevant markets, depending on whether it was the Capital City Area, with just under 100,000 homes and all connected to GR fibre-optic, and partly to Mila, or urban areas in East Iceland where xDSL connections constituted the large majority and where it was established that government policy was for fibre-optic rollout for the whole of Iceland.

There is little or no data as grounds for the PTA assertions in both markets and the PTA discussion is characterised by the text being largely direct quotations from chapters on the markets in question that were first analysed in the years 2007-2008. Since that time the situation has changed enormously, two new kinds of mobile network technology have emerged and tens of billions of public and private monies has been invested in the sector. It was therefore clear that the PTA had not researched access barriers, as there was no data behind the PTA investigation and reference is made to the PTA data list in support of this contention. The Administration took conclusions as given, without data, statistics or analysis.

Siminn also pointed out that adoption of Directive no. 2014/61/EU would have resulted in a much lower threshold for entry into the market if the Directive had been as Siminn had proposed, i.e., that parties requesting access could use dark fibre owned by public bodies in order to develop their own electronic communications systems, for the purpose of offering Internet service to homes. The PTA had opposed this proposal, though it had been clear that such access for parties to the market would have had a positive impact on the market.

In any event, one could nowhere find discussion on the access barriers that were reduced, and certainly not on new investments in fibre-optic resulting from Act no. 125/2019, which implemented the above Directive. The PTA had said that adoption of the Directive would reduce costs for deploying fibre-optic systems and that it was desirable that this analysis should also be used as a basis for PTA market analysis. It would have been normal that the PTA assessed this issue and at least identified opportunities for new parties to enter the market and to use the GR and Tengir cabling to offer fibre-optic service. This was not done, which was unfortunate and constituted a lack of research, which in turn led to the analysis being meaningless.

The position of the PTA

Here, Siminn comments on Section 8.4.1 in the preliminary draft, which carries the title "General comments on barriers to entry." These are general comments on potential access barriers. In the opinion of the PTA, Siminn's criticism is ungrounded.

The PTA does not agree with Síminn that there was a lack of investigation of the case, as this was a very detailed market analysis. As is customary, a further investigation and gathering of data, subsequent to this consultation on the preliminary draft, took place during the period last 30 April to 10 July. This detailed investigation broadly supports the conclusions presented in the preliminary draft. The PTA then opened an additional consultation on last 30 October

on issues that the PTA considered appropriate to change from the preliminary draft, among other things in the light of criticism from Siminn and Mila, such as on issues relating to geographic analysis, imposition of price obligations and that the version of fibre-optic lines called "Ljoslina" should continue to belong to Market 4 (Market 6/2008 for terminating segments of leased lines) and not be moved to Market 3a. Then the PTA also opened consultation on substitutability assessment for copper and fibre-optic and a consumer survey which the Administration commissioned in the autumn of 2020, and it was the assessment of the PTA that there was no reason to retract the Administration's initial position to the effect that there was still substitutability between copper and fibre-optic connections.

The PTA gathered data from electronic communications companies before the preliminary draft was opened for consultation. The PTA gathered even more detailed data from electronic communications companies and from other stakeholders after the above specified preliminary draft was opened for consultation on 30 April 2020. The Administration has now revised the preliminary draft market analysis, among other things with reference to comments from stakeholders and from the above specified consultations. The PTA furthermore relies on collection of data from its regular statistical research, which is conducted twice a year, on the gathering of specialised statistical data, among other things with a detailed consumer survey and on data from the infrastructure database of the GAF Institute and on more detailed analysis on the likely development of distribution of electronic communication networks and market share during the lifetime of the analysis in the revised draft decision (now Appendix A). In addition, various information about the market and its status is public information.

The PTA points out that subsequent to the additional consultation, the PTA intends to annually revise the list of those municipalities that are included in the areas with more competition, where obligations will be lighter. Such a methodology is more precise than projections of likely development in the future, which can be subject to many imponderables.

The PTA emphasises that, as the name suggests, this is a preliminary draft which the Administration submitted for consultation to stakeholders and it should be treated as such, among other things in order to elicit views and to be corrected, as appropriate, in accordance with good administrative practice. From Síminn's comments, one can mainly understand that it is considered that since 30 April 2020 there will be no more investigations.

The PTA will discuss specific comments from Siminn on access barriers, later in this document.

One can however note that Siminn says that the PTA makes no distinction between varying conditions related to access barriers widely across the country. The PTA rejects this. The PTA specifically discusses access barriers by area in Sections 6.6.2 and 7.6.2 in the revised analysis, and also in Sections 6 and 7 here above. It is natural that such discussion is nevertheless not as detailed and fine-grained by area as would have been the case had the PTA come to the conclusion that competitive conditions between areas differed significantly such that there would have been reason to segment the market geographically. Then there is the fact that the PTA had analysed the situation on each separate market, with respect to designating a party as having SMP and had elaborated obligations on each and every market. It was however not the conclusion of the PTA, as has been explained in detail in Sections 6 and 7 in the revised analysis (Appendix A) and in the same sections here above.

Then Siminn discusses here above, the EU Directive no. 2014/61/EU and Act no. 125/2019 on measures for economic deployment of electronic communications networks, which adopted the above specified directive into Icelandic law. The PTA simply opposed that the Directive be enshrined in law in this country in accordance with the Siminn proposals, i.e. that an obligation for access be imposed on parties, whether they were in public or private ownership, with respect to access to dark fibre, as this would have constituted incorrect adoption of the Directive and would have been inconsistent with the adoption of the Directive elsewhere in Europe. The legislation in question came into force on 1 January 2020 and for this reason is relatively untried, but it is nevertheless the assessment of the PTA that it can to some degree diminish access barriers, though access to basic material facilities such as ducts and conduits, have not driven competition forward in this country and have not been used to a great extent up to this point in time. The PTA however considers, as do most of the PTA sister institutions in Europe, that this legislation on its own is not sufficient against a party with SMP.

Siminn considers there to be few access barriers on the Icelandic electronic communications market and pointed out that Vodafone stated in its merger with respect to purchase of 365 miðlar hf. operations that "access barriers to electronic communications markets were small and then specifically because of changed and increased service from the wholesalers, Mila and GR." In the opinion of Siminn, one had to take into account that this was a declaration from Vodafone to the Competition Authority and therefore clear that it was not incorrect, unless the PTA succeeded in proving otherwise with data that has not previously seen the light of day.

The position of the PTA

With the Competition Authority Decision no. 42/2017, the Competition Authority authorised the merger of Vodafone and 365 miòlar hf., with conditions. Both companies were operating on the electronic communications and mass media market. The above specified conditions were in the form of a Settlement with the Competition Authority, which was to ensure competition on the electronic communications mass media markets. Regardless of what Vodafone may have said in the run-up to the Settlement in question, the Competition Authority clearly did not consider that there was effective competition on the Icelandic electronic communications market. In this analysis, the PTA has come to the same conclusion. It is well known that electronic communications companies make various assertions to the regulatory authorities in order to get their way. In addition to this, one should note that Vodafone has lost considerable market share since 2017 on electronic communications markets, while Siminn has remained steadily on course during the period. The PTA can therefore not see that competition has increased to any significant degree on the retail market for Internet service during the period, though Míla has, admittedly, lost some market share on the relevant markets, but nevertheless has somewhat over 50% share on both of them.

8.4.2 Control of infrastructure that is difficult to duplicate

Míla pointed out that in paragraph 854 in the draft, the PTA said that in larger areas such as the Capital City Area, there was a shortage of facilities for electronic communications

equipment. According to the PTA, Míla buildings were now almost fully used at some locations and there were obligations on the company for access where there was space, according to a prior decision by the PTA on the relevant market from 2014. GR had on the other hand, to a large extent used buildings owned by OR, but there was no access obligation on the company and OR offered hosting of equipment to a considerable extent. GR had also leased facilities in Míla buildings to some extent.

Míla was not aware of the above specified shortage of space that the PTA considered to be in Míla facilities in the Capital City Area. On the contrary, there was sufficient space in buildings, and this would only increase with the decommissioning of the voice telephony system. One reason why GR leased wall space from Míla in a number of telephone exchanges for cable closures was that the GR ground cable was spliced with GR in-house cable. Míla could only ask how the PTA had come to this conclusion and whether it was supported by any documentation.

The position of the PTA

The PTA plans to make appropriate changes to the text of the paragraph in accordance with the Míla assertion on the current status of hosting with the company. Sea PTA discussion on paragraph 860 here below.

Míla made comments on paragraph 858 in the preliminary draft, where it was stated that the PTA considered it unlikely that any party would see an advantage in installing a new local loop network with national coverage, but it was rather likely that companies such as for example utilities or individual municipalities in the countryside would rather concentrate on introducing fibre-optic to their home areas and that this would be done in smaller areas and that GR would focus on larger urban clusters in its operational territory.

The position of the PTA

The PTA is discussing that no parties on the market (except Míla) are likely to develop a local loop network with national coverage, including GR, during the lifetime of the analysis. The PTA had this confirmed in a reply from GR, dated 22 October 2020, to a query from the PTA dated last 8 and 9 October.

Míla referred to paragraph 860 in the preliminary draft where the PTA came to the conclusion that facilities could, along with delays in processing applications, be a barrier to competition, that was based on service offer through a fixed line access network, if the appropriate wholesale obligations were not in place.

Míla said that today there was no company at all that would deploy its own copper local loop network, but rather the parties would all deploy a fibre-optic network. No need for access to VDSL equipment in Míla street cabinets. Even if there was, it was not a major problem for the companies in question to set up special equipment in street cabinets. There was enough space in all of Míla's hosting facilities in the Capital City Area, and in all urban kernels in the countryside. The fact of the matter was that there was little demand from other fibre-optic companies to acquire facilities in Míla hosting space, but they would rather in general provide

their own space. For example, GR and Tengir were in transformers or in municipality spaces where the companies deployed fibre-optic. Most municipalities that had deployed fibre-optic in rural areas had used their facilities in schools or community centres for hosting facilities, and most had decided to construct another hosting location instead of using Míla facilities. Míla thought that this conclusion was wrong.

The position of the PTA

The PTA did not assert in the above specified paragraph that there was a shortage of hosting possibilities in Míla technical space, except in street cabinets, but stated that it could be a problem. There is doubtless some shortage of hosting possibilities at individual locations, but the PTA agrees with Míla that this is generally speaking not a problem. The PTA will make changes to the wording in paragraph 860 in the preliminary draft, in accordance with Míla's comments, to the effect that in addition to the current text in the paragraph: "The PTA draws the conclusion that shortage of facilities, can, along with delays in processing applications, be an obstacle for competition, that is based on service offer over a fixed line access network, if the appropriate wholesale obligations are not in place". This is then a general opinion about potential situations that can arise on the market and should be interpreted as such.

The following sentence will come in addition: "Shortage of space at Mila is generally not a problem with the company today, and in addition, space will increase with the decommissioning of the voice telephony system in the coming years. For this reason, shortage of facilities in buildings is not considered to be an obstacle to competition, given that obligations on access to this are in force, but they could be an access barrier if obligations were not in place."

Siminn considered it to be unclear what was meant by the PTA discussion, and what facilities were being discussed in Section 8.4.2 "control of facilities that are difficult to duplicate". There was no data to be found in the data list that indicated that the PTA had acquainted itself, among other things with whether and to what extent companies could make use of existing infrastructure. The PTA thus appears not to have conducted any investigation as to where the actual bottleneck was in the system, or the facilities that were difficult to duplicate.

Siminn pointed out that GR had the most widely distributed fibre-optic local loop system in the country and had 100% distribution in the Capital City Area. Fibre-optic local loop development in the Capital City Area should be the least expensive in the country, because of the economies in development, which other municipalities did not have.

Tengir had the most widely distributed fibre-optic local loop network in North Iceland, and not Míla, and thus it was unclear what facilities were difficult to duplicate in competition with Míla.

GR used premises of its affiliated companies to a large degree, i.e., the company Veitur ehf., which was a subsidiary of OR. Siminn could not see that the PTA had investigated access to Veitur ehf. spaces, and whether it was possible or likely that a company could acquire access to Veitur ehf. spaces. It was thus not established whether this would reduce entry barriers or increase them.

The PTA could simply have requested this information from parties to the market, i.e., how likely was it that they would during the next 5-10 years use ducts owned by other parties to build up their own fibre-optic local loop network. Then the PTA would also have been able to call for information from Tengir and GR on whether each company could provide access to its ducts.

Siminn considered it would be normal for the PTA to investigate those access barriers, and that if this had been done, data would have been gathered.

The position of the PTA

In the relevant section, the PTA deals in general about control of facilities that are difficult to duplicate (paragraphs 850-860), that could be problematic and expensive to duplicate.

In its conclusion, the PTA voices the opinion that shortage of facilities could, along with delays in processing applications, be an obstacle for competition that is based on service offer over a fixed line access network, if the appropriate wholesale obligations are not in place.

See also planned changes to paragraph 860 of the preliminary draft here above.

The PTA reiterates that on the basis of copper and fibre-optic local loops, there is no question that Míla and not GR has the most widely distributed local loop network in the country and that both companies have almost 100% distribution in the Capital City Area, when one considers both copper and fibre-optic networks.

Siminn said that the PTA could have requested information from parties to the market on how likely it was that they would use access to ducts and conduits owned by competitors. The PTA did this subsequent to the initial consultation. In replies from GR, Tengir and Snerpa, it was stated among other things that these companies would give this a thorough examination. Míla said for example, that it had requested access to GR ducts and conduits in Seltjarnarnes but had received no answer to that query. For this reason, the PTA considers it likely that electronic communications companies would use such access to a greater degree than before in the coming years in their endeavour to reduce costs of fibre-optic rollout.

Though companies have developed networks in competition with Míla in the most populated areas of the country, that does not mean to say that it is not difficult and expensive to develop such facilities. At no location is there more than one network competing with Míla (except in part of Reykjanesbær) and the PTA considers it obvious in the light of experience up to this point in time and in the light of costs of deploying fixed access networks that there will be oligopoly in this field in the foreseeable future because of how difficult and expensive it is to develop such a network and because of how small the market is in this country.

8.4.3 Sunk costs

Míla commented on paragraph 866 in the preliminary draft, where it was stated that new companies had found it difficult to compete with Míla at a national level, as the company controlled its own trunk line system, local loop network and related bitstream equipment, except mainly in limited areas. The PTA considered that sunk costs were an entry barrier for new companies on the wholesale market for fixed access.

Míla said in its comments that GR planned development at a national level and that Míla would, during the lifetime of the analysis, not have service with national coverage.

The position of the PTA

The PTA uses information from GR on estimated development during the lifetime of the analysis. It is true that GR is interested in continued development of the company's fibre-optic network beyond its existing operational territory. There is no implementation schedule available from GR for national coverage of the company system in the coming years, but it is clear from the GR answers to queries from the PTA from the autumn of 2020 that this will not happen during the lifetime of this analysis.

With respect to Míla, the PTA considers it clear that Míla will offer service mostly with national coverage during the lifetime of the analysis if one takes into account distribution of the company's copper and fibre-optic local loops and further fibre-optic deployment plans.

Today there is no other electronic communications company that even approaches being able to offer its service on the relevant markets with national coverage and the PTA cannot see that this will happen during the lifetime of this analysis.

Siminn discussed jointly sunk costs and economies of scope and scale in the PTA preliminary draft.

Siminn said that it did not fully understand the PTA discussion on sunk costs. The PTA asserted that new parties had found it difficult to compete with Míla at a national level except in "specific areas". Siminn pointed out that what are called the specific areas, where Tengir and GR competed with Míla, represented 75% of all homes in the country. The PTA had information from GR itself, that 90% of the country's homes would, within a few years have a fibre-optic local loop from a party other than Míla. That was the way it was in exceptional cases where parties had not entered competition with Míla, and it was Siminn's opinion that this was only because larger urban areas had been at the top of the queue. Those areas where parties had not entered competition with Míla were generally urban kernels with fewer than 1000 inhabitants.

During the next 2-3 years, Siminn would have made agreements with Tengir and GR on bitstream service, if everything went according to plan. At the same time the GR system would have reached 120,000 or 130,000 homes, while the Tengir system would have exceeded 10,000 homes. A total of about 130-140 thousand homes. The PTA had said in its analysis that GR would reach 130,000 homes and it was thus unclear which was the correct number. In any event, Tengir and GR would have fibre-optic local loops to 130-140,000 homes during the next 2-3 years which meant that in exceptional instances, Míla would not be in competition, as dwellings today are 143,000. It was in very defined and small areas where there was no competition with Míla and not vice versa. PTA assertions to the effect that it was only defined areas where there was competition in infrastructure were therefore totally inconsistent with the numbers that the PTA itself provided.

With respect to PTA discussion on the position of Míla in the countryside in paragraph 870, Siminn pointed out that development of fibre-optic local loops in the countryside was rather conducive to reducing economy of scale and thus probably to reducing Míla economy of scale where Míla had operations at these locations when GR passed them by and thus avoided the costs of operating at such locations. At the very least, the PTA could gather data to support its assertions.

In the PTA discussion on GR having a long way to go before it reached the Míla local loop system, it was clear that GR would extend its system to up to 120-130 thousand connections during the next 2-3 years, according to the PTA analysis. This is why Siminn found it difficult to understand the PTA assertions. In parallel to this development, the active Míla local loops would diminish as would also be the case with increased Tengir development.

The PTA assertions were in absolute contradiction to the data presented in the PTA analysis, which must be reasonably considered to be odd, and represented repeated indications of the lack of objectivity of the Administration and a lack of professionalism when making these so-called market analyses.

Simin pointed out that in the PTA discussion the advantage that GR had gained through its ownership connection with OR was omitted, and it was established that GR had received funds as a loan from OR, which the ESA had deemed to be state aid. The only possible doubt that ESA considered to be in the case was whether this was justified state aid, not whether it had been state aid.

The position of the PTA

In Paragraph 866 of the preliminary draft the PTA states: "It should also be noted that new companies find it difficult to start competing at national level with Mila, which has its own trunk line system, local loop network and appropriate bitstream equipment, except in limited areas. The PTA therefore considers that sunk costs are an entry barrier for new companies on the wholesale market for fixed access."

It has taken GR and Tengir many years, or more than a decade, to build up their networks and to gain the market status that the companies enjoy today in competition with Míla. Míla had 57% market share on Market 3a in the end of 2020, GR had 36% and Tengir had 5%. Others had a total of less than 3% market share. At that time, the development constituted a substantial financial risk. For this reason, new parties today find it even more difficult than before to enter the wholesale market for local access with a fixed connection and central access with fixed line connection for mass-market products.

Siminn considers that Míla economy of scale in the countryside probably does not exist, but the PTA points out that Míla is in a better position than smaller network operators because of expected economies in development and operation of the largest local loop network in the country, see among other things, Section 8.3 "Total size and profitability" in the revised preliminary draft. Míla also enjoys a trunk line network with national coverage, which is necessary for using access networks at each location. Míla's competitors do not have that.

Is clear that conclusions that the PTA drew in its preliminary assessment were on the basis of available data, but the distribution plans of GR and Tengir were incorrect, i.e., they allowed for too much distribution. Subject to additional data and information for those companies subsequent to the preliminary assessment, it is clear that the distribution plans are much more modest than as stated in the preliminary assessment, and the PTA will correct this. Míla distribution plans are on the other hand, much more ambitious according to information that the PTA gathered from Míla in the autumn of 2020.

With respect to the Siminn reference to alleged unlawful state aid for GR, this Siminn comment is replied to at another place in this document. Reference is made to this.

As Siminn knows, the preliminary draft was submitted for consultation, where stakeholders were offered to make comments on the draft as they felt necessary. For consultation to serve its purpose in each instance, it is desirable that the criticisms are presented in an objective, traceable and reasonable manner, instead of being unfounded accusations of bias and lack of professionalism which cannot be seen to be of any value in reaching a professional conclusion.

8.4.4 Economy of scale

Míla refers to paragraph 868 in the preliminary analysis, where it is stated that operation of a local loop system constitutes economy of scope in proportion with the scope and reach of such a network that was being operated by the party in question. This was e.g., because of the substantial underlying investment and fixed costs that were sunk in the network. Economy also manifested itself in lower initial costs as a result of bulk purchasing of cable and in agreements with contractors for excavation, finishing and connections into buildings. In the same way, economy of scale could result from the minimum number of repairmen and other staff with appropriate knowledge and specialisation that where needed to provide adequate service. These factors could in some instances be a barrier to entry into the market.

Míla said that by far the largest economy of scale was in usage of local loops in each area, i.e., in the amount of sold local loops. Economies in procurement were very small, as Iceland was a sparsely populated country, and there was therefore not much economy of scale to be gained when buying from abroad where purchasers of cable and equipment were investing in communities that numbered millions. The same could be said about contracts with contractors.

The position of the PTA

The PTA considers it perfectly clear that Míla should in general, enjoy economy of scale, more than smaller parties on the electronic communications market in this country, and in the paragraph the following is said about this issue:

"Economy of scale is said to exist in company operations where increased production means a lower total cost for a product or service unit. This is characteristic for technical companies which have relatively high fixed costs and low variable costs. Economy of scale can act both as an entry barrier and as a competitive advantage."

With respect to the Míla assertion about economies in procurement being very small because of the size of the company in an international context, the PTA has no dispute about the size of the company in international context. The PTA however points out that the size of the Siminn Group in this country above and beyond competitors is significant and even multiple compared to many of them, which under normal circumstances should return economies in procurement. It is clear that GR enjoys some economy of scale, but naturally less than Míla.

Míla pointed out that in paragraph 870 in the preliminary draft, it was stated by the PTA that one had to keep in mind that Míla offered service across the whole country and was the only company on the market in significant number of areas. In such a situation Míla had had time to establish itself and acquire all business in the regions in question, which was an option that other companies did not have. In addition to this, Míla had been purchasing many local fibre-optic networks in rural areas which had been deployed by municipalities with the help of the Telecommunications Fund. One can assume that this would make it less economic for new companies to enter the market areas in question and achieve minimum economy of scale.

Míla pointed out that in the countryside there was poor usage and costs were higher, which made it very difficult to achieve economies. It was not possible to achieve economies in contracts with contractors, except to a very limited degree, as agreements were made with local contractors. GR doubtless had its own contractors with whom it would be possible to achieve economies in agreements, in the light of the fact that the contractors in question were also working for OR.

The position of the PTA

Economy of scale of Míla and Siminn, should under all normal circumstances be significant when one considers the size and the position of the companies on the electronic communications market and that in general the Míla economy of scale is greater than that of GR. The PTA accepts the Míla comment on possible GR economies from contractors and will keep in mind where applicable in the relevant section of the revised preliminary draft (Appendix A).

Míla pointed out that in paragraph 872 in the preliminary analysis it was stated that despite the major development of the GR local loop network in the past years, there was still quite a way to go before it approaches the size of the Míla local loop network, except in a few municipalities in the south-west corner of the country, i.e. in Reykjavik and neighbouring municipalities in the Capital City Area and in the occasional municipalities in South West Iceland. The PTA did not expect there to be any changes in this situation, as the existing GR market territory and GR plans do not allow for nationwide development.

Míla said that this PTA assertion was in direct contradiction of the information that GR had issued. GR had notified, that it planned to offer service across the whole country. That had been stated in conversations between Míla and GR representatives. This had also come to light indirectly elsewhere, as e.g., in the document that GR sent into a consultation portal because of state plans for developing infrastructure, subsequent to the bad weather in December 2019.

The position of the PTA

An accurate account is that although GR now considers that the company's operational territory is the country as a whole in the long term, it has not yet been included in GR implementation plans that apply throughout the lifetime of this analysis, that fibre-optic be deployed across the whole country. The company says that it is continuously examining new opportunities to deploy fibre-optic, particularly in parallel with other civil works, on commercial grounds. One can say that the GR market territory is the whole country and that further opportunities are being examined for increasing fibre-optic connections to homes. The PTA will make appropriate changes to the text in paragraph 872 and elsewhere in the preliminary draft in discussion on GR to the effect that the company considers the whole country to be its market territory in the long term. The PTA however points out that such declarations and real distribution do not always go hand in hand. The PTA considers it impossible for GR to have a nationwide fibre-optic network during the lifetime of this analysis.

8.4.5 Economy of scope

Míla pointed out that in paragraph 885 in the preliminary draft, it was stated that of those companies that enjoyed economy of scope, the Siminn Group was a much larger company with more scope in its offer in the field of electronic communications service than Vodafone or GR, i.e. that Siminn in retail and Míla in wholesale had a more varied service offer than other companies that provide local loop service on the relevant market, and had greater opportunities than others to enjoy the economies provided by more products using staff, facilities and support services more efficiently, because of this broad product offer.

Míla rejected that the Siminn Group was a much larger company than OR/GR with respect to economy of scope. On the contrary, Míla considered that OR/GR had much greater economy of scope. GR could use OR civil works and could become a party to agreements that OR made with contractors. GR could furthermore, for example, implement civil works on roads itself at a much lower price, which Míla had not been allowed to do in Reykjavik but had rather needed to pay OR for such work. OR furthermore handled GR bookkeeping and invoicing system. One could in fact envisage electronic communications companies as utilities, because even though electronic communications services are not electricity or hot water, the structure was in reality the same, i.e., a network of conduits to homes and companies. It was therefore appropriate to compare the Siminn Group with OR and not with GR.

The position of the PTA

The PTA considers it more normal to discuss economy of scope in a narrower context than Míla chooses to do here, and it rejects the Míla conclusion that assessment of economy of scope of the Siminn Group should involve a comparison with the economy of OR and not GR. The PTA discusses however GR economy of scope in paragraph 881 in the preliminary draft, where it is stated that GR enjoys up to a point, such economies because of its ownership connection with OR. There were agreements between OR and GR to the effect that OR performs part of the necessary support service for GR operations, e.g., for invoicing service and bookkeeping. GR, however, pays OR for such support service.

8.4.6 Access to capital

Míla pointed out that in paragraph 891 in its preliminary draft, it was stated that it was an extremely expensive measure to build up a network with as much distribution as the one controlled by Míla, and to some extent an access network, such as that operated by GR today. The Míla network had been built to a large extent during the period of monopoly and state control. The development of the GR network was still incomplete and in reality, it was not certain how extensive it would be but there is every likelihood that it would not reach further than the south-west corner of the country. Tengir in Akureyri was still developing its fibre-optic network in Eyjafjörður area and in Þingeyjarsýsla, but this development was proportionately less advanced than the development in the Capital City Area. It was however clear that access to capital for developing an access network would continue to be a competitive barrier because of the high investment costs, as could be expected, particularly in more sparsely populated communities.

Míla pointed out, however, that throughout the whole financial crisis in 2008, and later, it had not been a problem for GR to continue its development. During recent years, GR had invested more in local loop networks than Míla had. At the same time the Siminn Group had had serious financial problems and had needed to minimise all investments. Míla therefore believed that GR had at least as good if not better access to capital than Míla. GR had notified about plans to continue fibre-optic rollout across the whole country. Norðurorka was a large shareholder in Tengir.

Further to this, part of the Míla network would be decommissioned during the lifetime of the analysis and Míla would not deploy a new one in its place.

Finally, Míla showed the following slide from GR with its comments on the above specified paragraph 891 in the preliminary draft.

Óskastaða 2025				
	TENGD HEIMILI 2019	NÚVERANDI ÁÆTLUN 2025	NÝ ÁÆTLUN 2025	
	101.000	120.000	SAMSTARF +15.000 SVEITANET +7.000 153.000 TENGIR +11.000	
(mila	65.000	100.000	SAMSTARF +40.000 SVEITANET +7.000 158.000 TENGIR +11.000	
TENGIR	10.000	11.000	Tvö sterk innviðakerfi	
SVEITANET	6.000	7.000	Sveitanet tengd kerfum	
LANDSHRING NATO	GUR 1	1	Traustara samkeppnisumhverfi	

The position of the PTA

The PTA stands by its assertion that access to capital for development of fibre-optic networks can continue to be a barrier to competition, particularly in rural communities that do not fulfil the conditions for state aid.

The PTA points out that all the main electronic communications companies in the country, i.e., Siminn, Míla, Vodafone and GR, have gone through a process of recapitalisation since the financial crisis arose in 2008, and have enjoyed support of their owners in restructuring the company's capitalisation. One could not see otherwise than that capitalisation of the Siminn Group is in good shape and that significant capital had been available in recent years for investments and would be in the coming years. Should the Siminn Group choose to capitalise Míla specifically, and separate this from Siminn capitalisation in the future, one could expect that Míla would be offered extremely advantageous terms on long-term financing for such an infrastructure company.

Information on investments in fixed assets in the PTA collection of statistics does not indicate that GR had better access to capital, subsequent to the bank crash than the Siminn Group, as maintained by Míla. If the investments of these companies related to the companies' electronic communications operations in 2008 are examined, and compared with investments subsequent to the bank crash [...]

With its objections, Mila sent a slide from GR, on strengthening of infrastructure, which bears the title "Desired situation 2025." The above specified GR plan harmonises materially with GR plans of looking at the country as a whole for the company's network rollout in the coming years. On the other hand, one must note that the slide in question is describing a kind of desired position, a best case scenario, as GR hoped would transpire in the year 2025 and was presented as a contribution to discussion on the future of electronic communications infrastructure in this country. As the PTA has explained here above, the Administration does not consider that the company's fibre-optic lines will extend beyond the south west corner of the country during the lifetime of this analysis, as the company's newest distribution plans do not allow for this. In addition to this, the above specified "desired position" is dependent on the condition that the company gains access to a fibre or fibres in the NATO cable, but at this point in time it is impossible to predict whether this will actually happen and if so, when. If GR reaches an agreement with Tengir and/or with the state-supported networks in the countryside, GR will not acquire those fibre-optic networks, but only operate its bitstream equipment on them. This would not increase the size of the company's network on Market 3a but only on Market 3b.

Míla finally asserts that part of the company's copper network will be decommissioned during the lifetime of the analysis and a new network will not be deployed in its place. PTA refers to its previous answers regarding similar assertions by Míla. There it was stated that the PTA did not consider that such could take place to the extent that would have an impact on the conclusions of the analysis in its lifetime, and in addition to this the PTA considered it not to be inconceivable that the purchase of Míla of small country networks, most of which had been deployed with state aid, would continue during the lifetime of the analysis.

Míla said that in paragraph 892 in the PTA preliminary draft, that it was stated that there were no commercial grounds for more than two networks. Nevertheless, all the PTA discussion was based on a policy to reduce Míla market share. It must therefore be the PTA objective that a company other than Míla had SMP. Míla would in all likelihood have less than 50% market share of the local loop market when the PSTN system was decommissioned in the years 2020 and 2021.

The position of the PTA

It was stated in the above paragraph of the preliminary draft that it was highly unlikely that there was a financial basis for more than two electronic communications networks in this country. The PTA will update the paragraph in question so that the financial basis would be unlikely to exist for more than two networks and in many rural areas for more than one.

The PTA reiterates that is not the policy of the Administration as such to reduce Míla market share, but rather to allow for it naturally diminishing with increased competition. Here above, the PTA has argued its assessment that there is every likelihood that the Míla market share will probably not fall under 50% on the relevant wholesale markets at the end of the lifetime of this analysis. At the turn of the year 2020/2021, the PSTN system was transferred from Siminn to Míla, and Míla plans to phase out that system in parallel with phasing out the copper system. The quick plans that Siminn had with respect to phasing out the PSTN system have in addition to this, not been implemented as quickly as planned, among other things because of COVID-19.

Míla referred to paragraph 893 in the preliminary draft, where it is stated that one had to note that it was not necessary to control a network with national coverage to survive on this market. It is also a fact that if one looked at the network operators that had entered the local loop market in recent years, none of them aimed to operate a network with national coverage. Network operators were even related to relevant utility companies that saw an advantage in connecting their market territory with fibre-optic. The same applied to individual municipalities.

Míla said that the PTA asserted that no network operator that had entered the local loop market in the past years intended to operate its own network with national coverage. This does not hold given the GR plans. In the future there would probably be no one with a local loop network with national coverage, neither Míla nor others. This would be the case during the lifetime of the analysis.

The position of the PTA

According to the GR long term projection for the years 2021-2025, the objective is to complete deployment of fibre-optic to homes in urban areas in Reykjanesbær, Árborg and Vogar á Vatnsleysuströnd. Along with connecting new buildings in the above specified areas and that the open network of GR's fiber would be on offer to most homes and companies in the country. Though GR now defined its operational territory as the whole country, the PTA considers that the company will be far from a network with national coverage at the end of the lifetime of this analysis, particularly on Market 3a. The PTA considers that GR is actually not aiming for a fibre-optic network with national coverage on Market 3a in the future, but only on Market 3b. It remains to be seen whether these plans will materialize, and it seems to

be a matter of time before GR will gain access to the NATO cable, which is planned to be offered in the autumn of 2021. What threads will be offered and when is still unclear.

Míla stated that in paragraph 895 in the preliminary draft, it was stated that the PTA believed that because developing access networks required such substantial funding that access to capital was an entry barrier for new companies on this market.

Míla considered that examples showed that this had not stopped companies from developing. It was clear that some funding was necessary, but companies like Snerpa, Tölvun and Austurljós had nevertheless deployed their own local networks without significant funding.

The position of the PTA

The PTA points out that this is very limited development conducted by the above specified parties, which has very little impact on the market as a whole, approximately 2%. It is clear that such development did however not take place without capital.

8.4.7 Barriers to expansion

Míla stated that in paragraph 898 in the preliminary analysis it was stated that with a new agreement between GR and the municipalities in Reykjanes and Árborg, it was expected that the number of households that could connect to the GR network would be about 120,000 at the end of 2023.

Míla stated that in paragraph 613 it was on the other hand said that GR would have 130,000 homes at the end of 2021. Míla wondered what was correct in this context.

The position of the PTA

The fact of the matter is that according to information from GR, dated 22 October 2020, the company's fibre-optic local loops reached over 109,000 spaces in the end of 2020 and the company expects that they will have reached about [...] at the end of 2023.

If GR enters the Tengir system and/or those of smaller parties in the countryside, GR will grow somewhat on Market 3b. Such is however entirely uncertain at this point in time.

Míla stated that in paragraph 901 in the preliminary analysis, it was stated that the PTA conclusion that growth possibilities in the field of installation and operation of local loop networks were limited and that the lack of growth possibilities was likely to act as a barrier for new companies on the relevant market.

Míla considered that it was precisely an opportunity for parties to deploy fibre-optic where the company only had copper. Míla pointed out on the other hand, that there was now a number of companies on the market (GR, Tengir, Snerpa, Kapalvæðing, Líf í Mýrdal and many municipalities) that were developing their own fibre-optic systems. In the same manner, the Westman Islands had announced interest in deploying their own fibre-optic network. Rollout of 5G would also be a threat to the copper local loop system, as it would be possible

to get a connection over 5G that was many times faster than over VDSL. Míla considered that the PTA conclusion was therefore not consistent with the reality.

The position of the PTA

The PTA stands by its assertion that growth possibilities in the field of installation and operation of local loop networks are limited and that the lack of growth possibilities is likely to act as a barrier for new companies on the relevant market on commercial terms. As regards reference to the town of Vestmannaeyjar, Mila announced in February 2021 the beginning of the town's fibre-optic installation in the year 2021. With respect to distribution of fibre-optic networks of other parties and the potential impact of 5G, the PTA refers to detailed replies on this issue here above.

Siminn said that the PTA statistical data showed that there was rapid movement in replacing xDSL with fibre-optic connections. In the opinion of Siminn, there were substantial growth possibilities in developing fibre-optic where the copper system was in place and that when this was done, there was rapid movement in replacing connections. The progress made by GR and Tengir, demonstrated this with respect to increase of fibre-optic local loops. The challenge was not barriers to growth, but economic parameters, as in the main, it was smaller urban kernels that remained to have fibre-optic rollout.

Siminn considered that the PTA investigation was significantly flawed and in no way reflected how development had been, but on the contrary investigation appears not to have been conducted and instead assertions made about an incorrect status.

The position of the PTA

The PTA points out that despite significant decommissioning of copper local loops, there are still many more customers of the Siminn Group, that have copper local loops than those that have fibre-optic local loops. At the end of 2020, the proportion of Mila copper local loops was about [...]% of the company's local loops sold, while fibre-optic local loops were about [...]%.

The PTA agrees with Siminn that the switching from xDSL to fibre-optic had been rapid, but pointed out that companies like GR and Tengir, had gradually developed their networks over an extended period of time, even well into the second decade. Míla had on the other hand, developed a significantly wide-reaching fibre-optic system in only 5 years, and according to information from the electronic communications companies, the greatest speed in continued development of fibre-optic networks during the lifetime of the analysis was in the hands of Míla. The gap will therefore shrink between Míla fibre-optic rollout on the one hand and the joint rollout of other parties during the lifetime of the analysis. It is therefore the opinion of the PTA that is difficult to see that there are significant growth opportunities on the relevant market as maintained by Siminn.

As has been stated by the PTA, the PTA decides what information is gathered in each instance and the Administration is in continuous contact with parties to the market, and in addition to this there is regular collection of information, including detailed statistical information (twice a year), information that is used in the PTA infrastructure database (GAF), information from the companies in Iceland, from the EU Commission and BEREC and from foreign data providers and from sister institutions.

The PTA has reacted to criticisms voiced by Míla and Siminn and has gathered even more data subsequent to the consultation on the Administration's preliminary draft, which took place during the period 30 April until 10 July 2020, and that mostly support the conclusions presented in the preliminary draft. The PTA has furthermore commissioned a consumer survey which among other things cast light on the factors that decide consumer choice and has gathered detailed information from parties to the market in the form of a large number of questionnaires.

The PTA therefore rejects repeated criticisms to the effect that lack of investigation of the market caused incorrect PTA conclusions. The PTA furthermore points out that stakeholders other than the Siminn Group, including the CA, generally agree with the position taken by the Administration and consider its analysis well-made and that it serves its purpose.

8.4.8 Sales and service systems

Míla referred to paragraph 907 in the preliminary draft, where it is stated that one could say that GR benefited from its relationship with OR and of having access to its service systems, in the same way that Míla benefited from access to the Siminn systems. It must be considered unlikely that other companies that plan operations on the relevant market had access to such developed service systems like these two companies had.

Míla drew attention to the fact that Vodafone appeared not to have been examined in this context.

The position of the PTA

The PTA will add Vodafone to this discussion, as the company has operated for years on the relevant wholesale markets and has developed its own systems. One could however say that Vodafone operates to a very limited degree on Market 3a, somewhat more on Market 3b, but first and foremost the company purchases Access Option 1 from Míla and bitstream access to the systems of GR, Tengir and Snerpa.

Míla referred to paragraph 908 in the preliminary draft, where the PTA concluded that investment in service systems could be an access barrier for new companies. Míla pointed out on the other hand that service systems were off-the-shelf products today and that it was possible to purchase them without problems. When Míla commenced development of service systems, they had to be written from scratch and significant costs were incurred on an annual basis in maintaining the systems. For this reason, Míla considered that this was not a real barrier for serious infrastructure companies.

The position of the PTA

It is clear that the cost of development and operation of service systems are significant, as has repeatedly been stated by Míla, for example in connection with cost analysis of tariff, and that they entail significant costs. One can however point out that in the agreement between Siminn and GR from July 2020, it is stated that a glidepath of many months is allowed for adapting the companies' information systems, which can hardly be called off-the-shelf products.

Is interesting to note in this connection a recent example from the annual statement of the Siminn Group for the year 2019, where the following is said by the Siminn chairman of the board, who underlines the importance of Information Systems:

"Since 2014 a new invoicing system has been introduced, financial systems have been upgraded, 4G connections to almost all homes in the country have been enabled, Siminn digital conversion has been commenced and the majority of the country's homes have been connected with fibre-optic."

8.4.9 Vertical integration

GR considered the PTA needed to investigate even more and to better assess the impact of vertical ownership of Míla and Siminn on the SMP status of both companies. There was no doubt whatsoever that both Míla and Siminn, as a company group, had SMP on the wholesale markets on the one hand and on retail markets on the other. GR also referred to analysis by the Competition Authority in support of this, with respect to the overall dominant position of the Siminn Group. With the market power held overall by the vertically integrated group, one did not only consider individual markets when assessing market power, but also other markets that could have an impact on that assessment. It could be thus clearly seen that companies within the Siminn Group had SMP on all markets on which the companies operated.

One could furthermore point out the large number of competition problems stemming from the vertical integration among other things that were discussed in the draft. Part of the purpose of imposing obligations on electronic communications companies with SMP, pursuant to article 27 of the Electronic Communications Act, see article 18 of the same act, was assuring efficient and equal competitive conditions. GR considered that insufficient attention was given to these factors in the market analysis and that an assessment had not been made of the impact of the vertically integrated connections between Míla and Siminn and their impact on Míla SMP. One could in this context, among other things, mention internal transactions between these companies, and unwillingness of both companies to provide other parties to the market with service etc. The large number of disputes related to the companies, both with the PTA and the Competition Authority, related in one way or another to measures or actions taken by the companies on competitive markets. It was important that further analysis and investigation should lead to obligations that the PTA had authority to impose on Míla pursuant to the law, tackled in a targeted manner, the problems with which the market had struggled in recent years.

The position of the PTA

The PTA considers that with the obligations that the intention is to maintain, or impose on the Siminn Group, the issues mentioned above by GR, are among other things taken into account, and thus there should be no reason to make more detailed analysis of the impact of vertical integration within the Group. The PTA does however note that in Sections 10.2 and 11.2 in the revised preliminary draft (Appendix A) there are explanations regarding potential and real competition problems that the PTA has identified on the relevant markets, and reference is made to this. Many of them are precisely related to vertical integration of the Siminn Group. It should also be noted that after the first draft in question went into national

consultation on 30 April 2020, GR and Siminn reached an agreement in July 2020 on Siminn's entry into GR's fibre-optic network in the form of bitstream access. In the opinion of the PTA, this agreement somewhat reduces the detrimental effects that the Siminn Group's vertical integration has caused, although in the PTA's opinion these effects are still significant.

Míla said that it seems that no consideration was given to the obligations that now rested on Míla and Siminn, among other things on the basis of the Settlement between the companies and the CA, that diminished any kind of alleged vertical integration impact that may be deemed to exist because of Siminn's ownership of Míla. The PTA appeared furthermore, to ignore the fact that Siminn was not obliged to do business with Míla for access to service over copper or fibre-optic networks. Should Siminn choose to purchase access and service on the GR or Tengir network, then the company was free to do so and even possibly obliged under certain circumstances, at least according to the PTA's 12 own precedent on the basis of paragraph 5 of article 45 of the Media Act.

With reference to all of the above, it was clear in the opinion Míla that the PTA had not adequately taken into account the market conditions that existed in this country, or future development of these conditions during the period of validity of the analysis, as the Administration was obliged to pursuant to article 16 of the Media Act, see also ESA recommendation and guidelines of the Commission. Here one also had to keep in mind that the lifetime of the PTA analysis had usually been considerably longer than was planned on the basis of ESA recommendations and in reality, market analyses had been in force for a minimum of 6-7 years. In the opinion of Míla, it was therefore even more important than otherwise to work meticulously, for the analysis to be conducted pursuant to the law and to take into account realistic future development of the market.

The position of the PTA

PTA has at other places in this document answered a similar comment from Míla and reference is made to that. Regarding the Settlement between the Siminn Group and the CA, reference is made to a comprehensive discussion of it in Sections 10.2.7 and 10.4.2 in the uptaded preliminary draft (Appendix A).

Míla referred to article 911 in the preliminary draft where it was stated that despite the fact that Míla only handled wholesale services and Siminn both wholesale and retail this did not alter the fact that these two companies together formed a vertically integrated company group. Siminn was Míla's largest customer as sales to Siminn represented over 70% of Míla's revenue. DSLAM equipment was located at Míla, like the local loop system, and Siminn leased access to local loops and bitstream access from Míla. As Míla was a subsidiary fully owned by Siminn, ownership, management and financial connections between the companies were undisputed.

-

¹² See PTA Decisions nos. 27/2019 and 2019/2018.

Míla referred to comments on paragraph 841 here above. The Settlement with the Competition Authority did prevent it being possible to leverage ownership, management and financial connections.

The position of the PTA

The PTA applies electronic communications legislation in its analysis and considers there to be no need to change is discussion on this issue in paragraphs 911 and 1087 in the preliminary draft. The purpose of making the Settlement between Siminn and the Competition Authority was to prevent the companies taking advantage of vertical integration in a negative manner against competitors and consumers. The Settlement in question does not in the opinion of PTA lead to Míla not having SMP on the relevant wholesale markets and the PTA refers to the total assessment that the Administration has made and that is presented in Sections 8 and 9 in the revised preliminary draft (Appendix A). Reference can also be made to the PTA's comprehensive discussion of the effects of the Settlement in this connection in Sections 10.2.7 and 10.4.2 in the appendix in question.

Míla refers to paragraph 912 in the preliminary draft, where it was stated that in the case of GR fibre-optic local loop, vertical integration was even more extensive with respect to the relevant wholesale market. GR actually did not sell access to its own local loops but only to bitstream. This was an instance of almost entirely internal sales on the relevant market i.e. the difference between local loops and bitstream was not particularly distinct to outside parties. Customers could generally not access local loops alone but also had to purchase access to bitstream. This was however not always the case as there are known examples of companies that had received access to dark fibre on the corporate market, but the companies that lease local loops from GR are relatively few.

Míla considered it on the other hand not normal that GR could deny providing access to its fibre-optic local loops. In Reykjavik, GR had 60% market share in mid-2019 and one could assume that it would be even greater today and would become even more in the coming years. The fact that GR denied companies access to its local loops was an access barrier. Míla found it amazing that the PTA should not react to this.

Position

GR has not been designated as a company with SMP on the relevant wholesale market for this reason the PTA has no authority in the law to impose the obligations on the company that it provides other electronic communications companies with access to local loops on the above-mentioned basis, contrary to the company's commercial policy. The PTA reiterated that the Administration came to the conclusion in this market analysis, that there was no reason to segment geographic markets in this country on the relevant wholesale markets, whether this was the Capital City Area or other areas. The proportion named by Míla about GR is not correct. The fact is that GR had about [...]% share in the number of local loops in use in the Capital City Area and [...]% in the operational territory as a whole at the end of 2020.

Vodafone also refers to the above specified paragraph 912 in the preliminary draft. Vodafone wondered what relatively few companies meant. Was it fewer than 10, 20 or 50? The largest companies/municipalities in the country could each have very many connections.

The position of the PTA

The PTA points out that this is a matter of confidentiality, and the Administration cannot publish more detailed information than is given in paragraph 912 in the preliminary draft. One can however say that the customers in question are first and foremost larger financial institutions and information technology companies, that require full control and management of their connections because of information and network security. This is only achieved by using their own equipment. Such connections are not at all numerous in comparison with mass-market products of the electronic communications companies. One could mention in this connection that the branches of banks and insurance companies are decreasing steadily in number.

Míla refers to paragraph 913 in the preliminary draft where the PTA considered that vertical integration on this market was likely to be an entry barrier for new companies to the market, despite some kind of self-imposed separation of wholesale and retail between Míla and Siminn in 2007, as the two companies were both part of the Siminn Group. The Settlement with the Competition Authority from March 2013 (the CA Decision no. 6/2013) reduced to some extent the management connections between Siminn and Míla but in no way did it exclude continuing vertical integration of the companies. The above specified Settlement had been changed in 2015 (the CA Decision no. 6/2015) on the merger of Skipti (former parent company of Siminn and Míla) and Siminn. It nevertheless to some extent lessened the impact of vertical integration that lease of local loops takes cost into account pursuant to obligations in force and was subject to surveillance by the PTA.

The PTA needed to make a real analysis of the impact of the Settlement in question on possibilities of vertical integration. The Settlement was precisely intended to prevent vertical integration and its possible impact.

The position of the PTA

The PTA considers there to be no need to change the text in the paragraph in question, other than to mention the planned ERT obligation on the Siminn Group regarding fibre-optics. The Settlement has now been in force for more than 7 years and was first and foremost intended to improve the position of the electronic communications companies that are competing with Siminn on the retail market, among other things with respect to equal access to Mila systems. The situation has changed little on the retail market in question and Siminn still had more than 46% market share at the end of 2020, and this has hardly declined during this period. The greatest change in the market during this period is in the distribution of fibre-optic networks, of both Mila and other electronic communications companies like GR and Tengir. The Settlement has not encouraged this development. Nevertheless, a detailed assessment of the impact of the Settlement can be found in Section 10.4.2 of this market analysis (Appendix A). In addition to this, the CA discovered in its Decision no. 25/2020, that specific provisions of the Settlement had been breached, and more provisions of the Settlement are being reviewed by the CA because of complaints from a large number of competitors of the Siminn

Group on further breaches of the Settlement. With the ruling of the Competition Appeals Committee no. 1/2020 of 13 January 2021, the committee came to the conclusion that the decision in question was annulled with regard to that part of the case due to the CA breach of formal rules during the investigation of the case. On the other hand, the committee confirmed the CA's decision that Siminn violated a provision prohibiting certain types of bundling in another Settlement between the Siminn Group and the CA from 2015.

Despite the Settlement, it is clear that Siminn benefits from Míla successes, and Míla benefits from Siminn successes. It also appears to be the reality that the Settlement has not led to other electronic communications companies trusting Míla more than before.

Míla stated that with reference to the judgement of the District Court of Reykjavík from 1 July 2020 in case no. E-3251/2018, Síminn hf. vs. PTA, Sýn hf., GR and Míla, it seemed clear that as things were, Siminn as a media provider was pursuant to paragraph 5 of article 45 of the Media Act, unauthorised to direct the business of those who wish to purchase access from the company to the content provider "Sjónvarp Símans Premium" to a related electronic communications company, i.e., Míla. From this one could only conclude that Siminn was also obliged to allow its customers to purchase access to the content provider through the network of another electronic communications company, such as GR. This conclusion would in all likelihood have a significant impact on the Siminn commercial policy for the future and would furthermore diminish any kind of indirect impact of alleged market power, which was implied to exist as a result of vertical integration of Siminn and Míla. It could not be seen from the PTA preliminary analysis, that this had been given any weighting when assessing the Míla market status, which was quite surprising, among other things in the light of the administrative decisions made by the PTA that related to interpretation of paragraph 5 of article 45 of the Media Act.

The position of the PTA

The agreement between Siminn and GR is from July 2020, and the PTA preliminary assessment was published for consultation on 30 April last year. The PTA could thus not in its preliminary assessment, describe an agreement that had not yet seen the light of day. Siminn says that it is also in negotiations on the entry of the company into the Tengir fibre-optic network, but agreement had not been reached. The agreement between Siminn and GR allows for up to [...]% of Siminn customers being on the GR network [...] after Siminn commences sales on the GR system. Sales commenced late august 2021. This objective shall therefore be achieved at some point in time in 2025, i.e., some considerable time after the lifetime of this analysis. It is therefore clear that the vast majority of Siminn customers will be on the Míla system until the end of the lifetime of this analysis. It is furthermore clear that a significant proportion of Siminn customers on the GR system, will be customers that are already on the GR system from other service providers.

This agreement, all things being equal, could therefore result in a few percentage points reductions of Míla market share, which would be spread over the lifetime of this analysis and actually, for a longer period of time than the expected lifetime of the analysis. Other developments could however strengthen Míla position during the lifetime of the analysis, particularly if companies like Vodafone and Hringdu moved increasingly from the GR system

to the Míla system, and PTA sources suggest that this is not inconceivable. This agreement, and the potential agreement between Siminn and Tengir, will therefore in the opinion of the PTA, not significantly diminish the impact of vertical integration within the Siminn Group. In the opinion of the PTA, these agreements are first and foremost to bridge the gap within the Siminn Group, until Míla has completed its fibre-optic rollout in areas where these companies operate. The PTA considers that this will happen over the whole GR operational territory in a large part of the operational territory of Tengir.

There will be further discussion on the above specified judgement of the District Court of Reykjavík in Section 10.2 in the revised preliminary draft (Appendix A) and in the same section here later in this document. One can however say here that the fact that Siminn has verifiably directed the custom of those that wish to purchase access to the content provider "Sjónvarp Símans Premium" to Míla, is precisely an example of the vertical integration that the Siminn Group has been taking advantage of, despite the Settlement and the ban provisions of paragraph 5 of article 45 of the Media Act. With this judgement, the Siminn willingness to direct its customers to Míla was manifest and is one example of how vertical integration manifests itself in action.

Siminn said that it was remarkable that the PTA discussion in Section 8.4.9 in the preliminary draft, on vertical integration in the preliminary draft was almost word for word the same as in the older analysis, without it having been investigated whether it was still correct. It was not supported by arguments in any manner in the discussion, how the status of Siminn and Mila represented barriers to access. Siminn vertical integration in the Tengir operational territory was less than the PTA maintained, as Siminn used the Tengir system in a majority of cases, and this development would continue with increased switching of xDSL connections to fibre-optic connections.

Then Míla was competing with Tengir and GR, and in both instances the latter companies achieve better results than Míla, so one can hardly see that the Siminn Group had acted as an entrance barrier. It was necessary to look at the facts and not build on guesswork.

On the contrary, there was no adequate proof that the Siminn Group had inhibited the growth of Tengir or GR. Siminn challenged the PTA to desist from basing its discussion on guesswork, bias or opinions that were not supported by real data. Discussion on access barriers was incorrect in almost all main aspects and therefore needed to be put to one side and the work done again from scratch.

The position of the PTA

The assessment of the PTA is that vertical integration on this market is likely to be an access barrier for new companies on the market. This applies both to GR and the Siminn Group. One cannot therefore see on what the Siminn criticism of PTA guesswork and bias is based, with respect to assessment of vertical integration on the market. The PTA has at its disposal, sufficient information to stand by its assessment in its preliminary draft, to the effect that vertical integration of the Siminn Group on the one hand and GR on the other, is likely to be to some extent an access barrier for new parties' entry into the market. The vertical integration of the Siminn Group is however greater than GR, as GR does not operate on the retail market and in addition to this the Míla market share was 57% on Market 3a at end of year 2020, while

that of GR was 36%. In the opinion of the PTA, the Míla fibre-optic system will continue to grow at great speed during the lifetime of the analysis, and the gap will therefore shrink between Míla distribution on the one hand and that of the company's competitors on the other during the lifetime of the analysis. This will even further strengthen the position of the Siminn Group and strengthen its vertical integration.

In the opinion of the PTA, the size of the Tengir system is not sufficient for one to consider that vertical integration of that company is an access barrier for new companies on the relevant market. The Tengir market share was 5% at end of year 2020.

8.4.10 Conclusion concerning entry barriers in the relevant market

Tengir agrees with the PT conclusion that there are access barriers for new companies entering the relevant wholesale market, which strengthen the position of Míla on the relevant market and weaken the position of other smaller companies such as Tengir

The position of the PTA

Tengir's view harmonises with the PTA conclusion on entry barriers on the relevant market.

Nova agrees with the PTA conclusion that barriers exist for new companies entering the relevant wholesale markets, which strengthen Míla's position on the relevant market. At most locations in the country, there was only one party that provided the important service necessary to serve consumers.

The position of the PTA

The Nova opinion is according to the PTA conclusion on entry barriers on the relevant market. The PTA however does not agree that at most locations in the country there is only one party that provides local loop and bitstream service. Unless Nova means wide reaching geographic areas. About 70-80% of the country's inhabitants live in an area where there are two local loop networks in place, regardless of whether they are in the form of copper or fibre-optic networks, and almost half of the inhabitants of the country have the option of two fibre-optic networks.

Míla stated that in paragraph 917 in the preliminary draft it was stated that Míla as part of the Siminn Group, enjoyed economies of scale and scope where it was not foreseeable that competitors could equal them during the lifetime of the analysis and that inevitably, new companies on the market would find it difficult to compete with such circumstances and this created a significant entrance barrier.

Míla said that GR did not need to limit investments, like most other companies, including Míla after the financial crash in 2008. On the contrary, GR had increased them. This indicated that GR had access to very patient capital. In the period from 2008 - 2013, GR had for example invested for about ISK 6.3 billion, while Míla investments had amounted to ISK 5.8 billion.

At the same time, GR revenue had been ISK 6.6 billion, while Míla revenue had been ISK 33 billion.

The position of the PTA

The PTA accepts the Mila comment, which supports the PTA assertion that there is a need for patient capital because of how costly and time-consuming development of a local loop network is, and it is therefore an access barrier for new parties to the market.

As the investments of Míla and GR show, these are very large investments, and one must take a long-term view when financing such projects. One cannot see otherwise than that all of the main electronic communications companies in the country have had good access to capital since the financial crash in 2008 as experience has shown. This does not change however the fact that these are very expensive investments and the more parties that have established themselves on the market, the more difficult financing is for new parties, and this can act as a barrier to entry into the local loop market. The PTA furthermore refers to the answer here above, where it was stated that the Siminn Group had been quicker to reach their former investment level than GR subsequent to the financial crash. Reference is made to this.

Mila referred to paragraph 923 in the preliminary draft, where it is stated that access barriers were lower for companies that planned small and local distribution. A number of municipalities and/or companies had deployed access networks with state support and were already operating in the countryside. Such networks were mostly owned by local municipalities and/or utility companies and to a limited extent had been developed on competitive grounds. This aside, Mila had been purchasing many of them in recent times. These local loop networks would however never have a significant impact on the market, except possibly on a very local basis and in addition to this they would not enjoy economies of scale and scope. The PTA believed that the entry of smaller companies in sparsely populated communities did not have significant impact on the market as a whole.

Míla considered that here there was a certain contradiction. In the main text it was implied that Míla had purchased part of these countryside networks. In the footnote, it was stated that this was not the case. The question was which was right. A normal metric would for example have been the number of local loops in such networks that Míla had purchased and then to compare this with the total number of such local loops, instead of counting the number of municipalities where such purchase had taken place. The reason was that it was mainly the smallest systems there were for sale. Here, the PTA does not seem to be applying real data.

The position of the PTA

With reference to the Míla comment that there is a contradiction in the PTA text, the PTA points out that in paragraph 923, the Administration states that "Apart from this, Míla has been purchasing many of them in recent times." and in footnote 133 states "Míla has purchased a number of these networks, but in most instances the networks are leased to electronic communications companies, including Míla." It is not possible to see a contradiction in the wording.

It is furthermore announced that the PTA has worked on a detailed study of all state supported fibre-optic systems, including their ownership. In December 2020, the PTA requested precise information on Mila ownership of countryside networks that had been built with state aid and on the number of local loops in each one. From Mila's responses, it is clear that Mila has acquired control of about 1.600 connections out of just over 6.000 connections that will become connectable when the project "Iceland connected to fibre-optic" ends in 2022, or about 25% of connectable assets. The PTA assumes that that development can continue over the lifetime of the analysis. All these rural networks are described in the revised preliminary draft (Appendix A), including in Section 6.3. The PTA has therefore updated the list of these municipalities in an updated analysis (Appendix A).

Míla referred to paragraph 924 in the preliminary draft where it is stated that with the above referenced discussion in mind the PTA concluded that barriers existed for new companies entering the relevant wholesale markets, which strengthened Míla's position on the relevant market.

Míla raised serious objections to the PTA not having discussed the GR access barrier with respect to access to the company's fibre-optic. GR had more market share than Míla in Reykjavik, and in fact in the whole Capital City Area, if one took into account that stripped local loops were on their way out during the lifetime of this analysis. GR enjoyed all kinds of economies because of its connection with OR, e.g., integration in support services, contracts with OR contractors on civil works and access to OR capital, e.g., through share capital increases. In the opinion of Míla, access barriers for new companies supported the GR position on the relevant market.

The PTA did not note that there were wide reaching obligations that rested on Míla for equal access for companies to the company's systems, e.g., EoI equivalence of input obligations, that made the positions of the companies on the markets completely equal, and in addition to this, the Settlement imposed major limitations on Siminn for using Míla management control. This should mean that all parties to the markets that purchased service from Míla were competing at the same level. Míla had lost significant market share in recent years. The company was an infrastructure company which meant that it was normal that market shares should change relatively slowly. The fact that the company had lost about 20% market share at a national level since the last analysis, and in some areas of the country 100%, could not be considered other than a rapid development on those markets that are here under discussion. This indicated significant competition on the market.

The position of the PTA

In the paragraph, discussion is being summarised on access barriers for new parties that strengthened the position of Míla on the market. It is clear that GR has up to this point in time not been designated as a company with SMP, which means that there has been no authority pursuant to the Electronic Communications Act to impose obligations on that company. Míla, on the other hand, was designated as a company with SMP in the market analysis currently in force, see PTA Decision no. 21/2014. The comments made here with respect to the above specified paragraph 924 have been answered here above, and reference is made to that.

Siminn indicated conclusions concerning entry barriers to the relevant market. Siminn could wholeheartedly agree that there were access barriers on the market, but they did not come from the Siminn Group, but rather from the fact that fibre-optic access systems had been developed by GR and Tengir. In the opinion of Siminn, it was unlikely that the company would enter into competition with these two companies. Míla was the most likely party to deploy fibre-optic, but that would probably be limited to areas where the existing Míla infrastructure made it possible for the company to update its system in an economic manner or where the dwellings were economic, such as e.g., with buildings with multiple dwellings. If the EU high speed network directive had been adopted as Siminn had proposed so that parties in public ownership had been obliged to accede to reasonable and fair requests for access to grey fibre-optic, then the access barriers would have been lower. The PTA had opposed this and that was the end of the matter.

In the PTA analysis, one can hardly find a mention of the entry and success of GR and Tengir, and the PTA focused on development of xDSL systems in competition with the Míla xDSL system. It seemed that no investigation had been made and that to all intents and purposes the same text was used as was written when the markets in question had been analysed, i.e. when xDSL was dominant.

The PTA, for example, did not discuss at all the fact that the entry of parties to Market 3b was difficult because GR did not offer access without bitstream.

Then the PTA did not discuss in any way, the fact that Tengir was the party that had already deployed a fibre-optic local loop network in North Iceland. Simin considered that the PTA needed to examine which parties had entered the market and what services they offered.

Discussion on access barriers was incorrect in almost all instances and therefore needed to be put to one side and the work done again from scratch.

The position of the PTA

The PTA has here above answered most of the Siminn comments that are made here and refers to that.

The PTA agrees with Siminn that there were access barriers on the market but did not agree with the Siminn assertion that they did not come from the Siminn Group, but rather from the fact that fibre-optic access systems had been developed by GR and Tengir. In the opinion of Siminn, it was unlikely that the company would enter into competition with these two companies.

The reason for this was on the other hand, in the opinion of the PTA, the fact that in addition to the development by the Siminn Group, there were fibre-optic and access networks of GR and Tengir in the operational territories of those companies. In the opinion of the PTA, it was unlikely that a new company would enter into competition with these companies.

The PTA considers that the Siminn assertion that in the PTA preliminary draft one could hardly find a mention of the entry and success of GR or Tengir, to be absurd and without substance and that it does not hold if the draft and the revised preliminary draft (Appendix A) are examined. (Tengir occurs, for example at least 118 times in the preliminary draft).

The PTA also entirely rejects the Siminn assertion that the PTA discussion on access barriers was incorrect in almost all main elements.

The PTA does not agree with Siminn that there was a lack of investigation of the case, as this was a very detailed market analysis. As is customary, further investigations and gathering of data took place subsequent to the initial consultation which took place during the period last 30 April to 10 July 2020, and they largely support the conclusions presented in the preliminary draft. The PTA then opened an additional consultation on last 30 October 2020 on issues that the PTA considered appropriate to change from the preliminary draft, among other things in the light of criticism from Siminn and Mila, such as on issues relating to geographic analysis, imposition of price obligations and that fibre-optic lines should continue to belong to Market 4 (Market 6/2008 for terminating segments of leased lines) and not be moved to Market 3a. Then the PTA also opened consultation on substitutability assessment for copper and fibre-optic, a consumer survey etc. that the Administration commissioned in the autumn of 2020, and the PTA considers that there is still substitutability.

The PTA points out that the market here being analysed is the wholesale market for local access with fixed line connection (Market 3a). The main parties to the market are Míla, GR and Tengir. It is clear that Nova, Vodafone and Hringdu are not operating on this wholesale market, but they are on the other hand, operating on a related retail market for Internet service.

One must however keep in mind the fact that in the Explanatory Note to the EU Commission Recommendation, it is stated that before wholesale markets are defined, one should assess whether there would be effective competition at retail level *if obligations on the underlying wholesale markets were not in place*. If it is thought that there was effective competition on the retail market, then the wholesale markets should be examined, and this examination should commence with the market that is first in the value chain (M3a). It shall subsequently be evaluated whether there is a need for obligations at the next wholesale level (M3b).

The PTA refers to Section 3 in the revised preliminary draft (Appendix A) that deals with competitive conditions on the relevant retail market, where the conclusion of the PTA is to the effect that there is no effective competition.

8.5 Competition problems on the market in question

8.5.1 Customer countervailing buying power

Míla refers to paragraph 927 in the preliminary draft, where it is stated that purchasers with a strong negotiating position could have an impact on competition and limit the possibilities of a seller to operate without taking competitors and customers into consideration. A strong negotiating position was mainly in place when the same purchaser purchased a large portion of an operator's production, was well informed of other offerings, could switch to another operator without significant expense and even had the potential to commence production of a comparable product/service.

Míla pointed out that GR had a very strong negotiating position against electronic communication companies other than Siminn, as Míla customers appeared solely to do business with the company where there was no offer of fibre-optic from GR.

The position of the PTA

The PTA points out that this was general discussion on negotiating power of purchasers and therefore the Míla comment did not give reason for changing the text. However, the PTA states that companies such as Vodafone and Hringdu not only buy bitstream services via fibre-optics from GR, but also from Mila.

Míla referred to paragraph 930, (see also paragraph 1105 with respect to Market 3b) in the preliminary draft, where it was stated that a purchaser only had significant negotiating power on the local loop market when he had the possibility to turn to a minimum of two companies with respect to lease of local loops. This was however not possible in large regions of the country in the current circumstances.

Míla said that about 20% of inhabitants who did not have the choice of two network operators was hardly a large part of the country. According to the analysis, other parties had deployed fibre-optic to 80% of households in the country and such networks would reach about 92-95% of homes at the end of 2021. Today, electronic communications companies could therefore choose between local loop companies in 80% of cases and over 90% within 2 years. For this reason, Míla considered the PTA assertion to be wrong. The PTA had in the opinion Míla, not demonstrated anything other than that Míla served all its customers equally and it was clear that Míla tried its best to keep its customers happy within the obligations that rested on the company. Míla pointed out that most companies on the retail market had concentrated on competitive areas where it was much less expensive to compete. In this connection one could mention, for example Hringdu and Nova, that had not been marketing outside competitive areas except to a very small degree.

The position of the PTA

The PTA points out that this was general discussion on negotiating power of purchasers and therefore the Míla comment did not give reason for changing the text. Given the newest information on the distribution plans of GR, Tengir, Snerpa and Austurljós during the lifetime of the analysis, it is clear that the distribution figures mentioned by Míla here above are considerably too high. It is probably true that distribution of two networks will reach about 80% of homes in the country at the end of the lifetime of the analysis and reference is made to more detailed discussion on this in Section 6.3 here above and in the same section of the revised preliminary draft market analysis (Appendix A).

The PTA furthermore considers it not unlikely that service providers like Nova and Hringdu will increase their offer of service in the countryside during the lifetime of this analysis.

Though Siminn has made an agreement on access to GR bitstream service over GR fibre-optic local loops in July 2020, it is clear that by far the largest proportion of Siminn customers will still be on the copper and fibre-optic local loop networks of Míla during the

lifetime of analysis. Simin is expected to start providing services the GR network in the second half of 2021.

The PTA considers that Vodafone's countervailing buying power vis-à-vis GR is still very significant, as the majority of Vodafone connections are on GR systems today. The PTA has information that [...]. It is not possible to exclude such a change.

8.5.2 Product diversification / bundling

Nova considered that Siminn bundling of service on the Míla access network was clear and that it strengthened the position of both of these parties, i.e. Míla with a very reliable customer (Siminn in retail) with a very large market share, that would rather not do business with other parties, if that could be avoided. Both were a barrier and inhibited competition on the market.

The position of the PTA

The opinion of Nova is in accordance with the conclusion of the PTA with respect to bundling of Siminn and Míla. Until now, Siminn has almost exclusively traded with Mila, but in July 2020 Siminn entered into an agreement on the entry of GR's fibre-optic network in the form of bitstream services. It is expected that Siminn will start offering services on GR's network in the second half of 2021. As previously stated, the PTA considers that this will not have a significant effect on the outcome of the analysis over its lifetime and that Siminn's customers will remain largely on Mila's networks.

Míla referred to paragraph 938 in the preliminary draft where it was stated that Siminn bundling in retail service on the Míla access network strengthened Míla's position significantly on the relevant wholesale market and was considered to be a barrier for new parties being able to get a foothold in the market for fixed access networks.

Míla pointed out that it seemed not to be difficult for other parties to get a foothold on the market in Reykjavik, which indicated that it was necessary to divide the country into varying geographic markets.

The position of the PTA

The PTA stands by its assertion and points out that only GR had built up a network in Reykjavik during the last 15 years. This indicated that it was difficult for other parties to get a foothold on the market, and Siminn, which was by far the largest party on the retail market, had almost exclusively used the Míla network up to this point in time. Even though Siminn had made an agreement with GR on access to GR bitstream service in July 2020, it is not expected that the induction work will be completed until the second half of 2021. Siminn commenced service in late augist 2021 The PTA does not expect otherwise than that the vast majority of Siminn customers will remain on the Míla copper and fibre-optic network for the lifetime of this analysis, and in the agreement in question, the objective is that up to [...]% of Siminn customers will be on the GR network in the year 2025, which is about [...] after Siminn began to offer service on the GR network.

8.5.3 Possible competition

Míla referred to paragraph 942 in the preliminary draft where it is stated that the PTA conclusion was that there was little likelihood that new parties would get a foothold and would commence competition on the local loop market with the incumbent network operators, particularly at national level, except possibly small local state-supported networks. Many local fibre-optic networks had been deployed for the purpose of providing residents in the relevant area with access to fibre-optic. They generally had no plans for further development of a nationwide network in competition with Míla. In addition to this there was nothing to indicate that other network solutions like wireless connections would change much in the near future. Possible competition with Míla at a national level was thus not on the horizon during the period of validity of this analysis. It was more likely that the development would continue to be such that Míla would purchase local fibre-optic networks where they were on offer.

Míla pointed out that according to GR plans, the company intended to operate a network with national coverage. During the lifetime of the analysis, Míla would not have a network with national coverage and parties such as GR, Tengir and Snerpa would be the only network operators in some areas.

The position of the PTA

Míla copper and fibre-optic access networks now reach most homes and companies in the country and Míla has conducted major development of its fibre-optic network in the Capital City Area and around the country during recent years. The PTA does not expect that Míla will not operate copper or fibre-optic local loop networks in any area to any significant degree at the end of the lifetime of this analysis. In the opinion of the PTA Míla will first and foremost decommission its copper local loop network where the company has rolled out fibre-optic. This would then be mainly in very sparsely populated rural areas, that did not have a significant impact on the conclusion of the analysis. The development plans of GR, Tengir, Snerpa and Austurljós are fairly modest for the lifetime of the analysis, while Mila's plans are ambitious.

Míla mentioned in general comments on competitive conditions, that the largest proportion of homes in the country already had access to two competing fibre-optic networks, i.e. where more than one service provider operated a fibre-optic network with connections into homes. According to Míla figures, this applied to about 60% of homes in the GR operational territory and to about 13% in the Tengir operational territory, which is about 57% of homes in the country. This area today covered 83% of homes and would reach about 90% of homes during the lifetime of the analysis. This appears to be rather special compared with other countries in Europe. In any event, Míla was not aware of examples anywhere else with such wide distribution of 1000 Mb/s synchronous Internet connections over fibre-optic.

It was also established that the fibre-optic networks of GR and Tengir jointly reached a large majority of homes in the country. According to the PTA preliminary draft, see for example paragraph 465, the GR fibre-optic network reached 73% of homes in the country and the Tengir network reached 7% of homes in the country at end of year 2019, which is a total of 80% of all homes in the country. According to information from GR and Tengir, the companies plan to achieve about 92% distribution by end of year 2021. Distribution of

municipalities reached about 2-4% of homes. According to the market analysis, the distribution of parties other than Míla over fibre-optic would reach around 94-96% of all homes and companies in the country at the end of 2021. Míla thought that this position was even unique, at least in Europe. Very little account appears however to have been taken of this.

In the Analysys Mason report on page 2, Section 2.1, it is stated that the PTA emphasised the very small area covered by competitive fibre-optic, this one could see for example, in paragraphs 959 and 1105. On the other hand, it was stated in paragraph 977 that the GR distribution reached about 102,000 homes and companies at end of 2019 and would reach 120,000 homes and companies at end of 2020 and 130,000 at end of 2021 It was also stated that Tengir distribution had reached about 9000 homes and companies at end of 2019 and would reach 11,000 and 12,000 at end of year 2020 and 2021.

Míla distribution overlapped 60% of the GR distribution, i.e. 60% of homes and companies connected to the GR network have the option of connecting to the Míla fibre-optic network, and there was 13% overlap with the Tengir network.

The position of the PTA

The PTA considers there to be no reason to change its discussion on competition on the relevant markets, with respect to the above specified Míla comments.

As previously stated, the PTA will revise and harmonise numerical information in the revised analysis (Appendix A).

Míla refers among other things to paragraph 465 in the preliminary analysis, in Section 6.5.2 (Conclusion on position on retail market, with respect to geographic analysis). A similar comment has been answered in detail in Section 6.4 (Position on retail market, with respect to geographical analysis), here above and reference is made to that. It is stated there that Míla significantly overestimates GR distribution figures in the lifetime of the analysis.

8.5.4 Pressure from substitute products

Míla referred to paragraph 947 in the preliminary draft, where it was stated that it was the assessment of the PTA that there was no pressure from potential substitute products on the market and that this was not likely to change much during the lifetime of the analysis.

Míla considered that the PTA had not assessed the arrival of 5G networks correctly. These networks offered up to 10 Gb/s connections and could therefore offer significantly more powerful connections than fixed line connections over copper. The technology also offered up to 10x faster connections than existing Míla fibre-optic technology. It was clear that Nova had commenced operation of a 5G network in May 2020.

The position of the PTA

The PTA refers to discussion on substitutability assessment over fixed networks and mobile networks in Sections 3 and 4 and in the revised preliminary draft (Appendix A) and in the same sections here above.

8.5.5 Customer choice and potential switching costs/the effects of binding contracts

Míla referred to paragraph 949 in the preliminary draft, where it was stated that one had to take into account the fact that in large areas of the country, Míla was the only network operator that service providers could approach. It was also a fact that despite the development of new systems, Míla had had its system in use since the inception of Internet use and it was thus inevitable that service providers had taken this into account and tried to adapt their systems to access to Míla's copper network.

Míla said this was not entirely true. [...]. Míla would not have its own network in large areas during the lifetime of the analysis.

The position of the PTA

In the opinion of the PTA, Míla dominates the market at a national level, as copper and fibre-optic local loops are defined on the same market and there is considered to be no reason to segment the relevant wholesale markets geographically. The fact that one relatively small service provider does not use the Míla system to a great degree, does not change this. Obligations are therefore imposed on Míla as a company with SMP. The same does not apply to GR or to other companies on the market.

Míla referred to paragraph 950 in the preliminary draft, where it was stated that replacing systems in order to migrate to other networks, such as to connect to fibre-optic local loops, could be costly and time-consuming. Parties to the market had to a large extent avoided this by dealing with GR, which sold them bitstream access to the fibre-optic network, which meant that the companies did not have to purchase the connection equipment needed to connect directly to their local loops. One had however to keep in mind that with this, the companies descend in the value chain and the control they have over the service they provide diminishes.

Míla said that GR had refused to supply other electronic communications companies with service lower in the value chain. It was therefore not choice on the part of the electronic communications companies to purchase bitstream from GR, it was the only option. It was very unusual that the party that had in fact market dominance in Reykjavik, did not need to offer its service lower in the value chain. Míla raised serious objections to this paragraph. As the PR considered it an improvement for GR not to offer service lower in the value chain, as it was so expensive for other companies to install expensive equipment, it would not be desirable for the PTA to place so much emphasis on imposing such obligations on Míla to provide products on Market 3a. Míla was offering bitstream access, and according to these PTA arguments this should suffice for all Míla customers and the companies would thus benefit from not needing to provide endpoint equipment.

The position of the PTA

In the opinion of the PTA, Mila dominates the market at a national level, as copper and fibreoptic local loops are defined on the same market and there is considered to be no reason to segment the relevant wholesale markets geographically. Obligations are therefore imposed on Míla as a company with SMP. The same does not apply to GR or to other companies on the market.

The PTA considers that in reality, access to GR fibre-optic local loops (dark fibre) would first and foremost benefit the company with market dominance, i.e. Míla. The PTA cannot see otherwise than that the arrangement adopted by GR is at least ideal for smaller service providers in this country. The Icelandic electronic communications market is very small in a European comparison, which means that there are limitations to how realistic it is that many Icelandic electronic communications companies will climb the investment ladder.

Míla also criticises being subjected to obligations for local loop lease in the company's fibre-optic. When data from Míla are examined, it comes to light that the company's fibre-optic local loop lease, without bitstream service, is negligible. This means that the arrangements of Míla and GR are comparable in this respect.

8.5.6 Conclusions on competition on the relevant market

Nova referred to paragraph 953 in the preliminary draft, and agreed that purchasers' negotiating power for Míla services was very weak. This manifested itself, among other things in there being little initiative on the part of Míla for the sale of service and no discounts or arrangements were on offer that could be an incentive to others to do business. When asked about discount or better terms, the answers were always to the effect that the price was cost analysed and discounts therefore not on offer. Nova purchased a significant amount of service from Míla, but despite this fact there seemed to be rather little interest from Míla for further development of cooperation.

In connection with paragraph 956, Nova furthermore believes that it is not right to ignore the fact that Siminn always purchases from Míla, where this was an option, or as is stated in paragraph 953, Siminn business was 70% of Míla revenue. On the consumer market, it was therefore very important that the largest retailer, Siminn, only used Míla service if it was on offer.

The position of the PTA

The Nova opinion harmonises with the PTA position on Míla negotiating power on the relevant market. The same applies to the PTA position that Siminn, as the largest retailer, only uses Míla service where it was an option in each instance. After the preliminary draft in question was submitted for consultation at the end of April 2020, Siminn did admittedly make an agreement on entering into the GR system, and here above, the PTA has explained that in the opinion of the PTA, this would not change the whole picture to any degree during the lifetime of the analysis. Reference is made to this discussion.

Míla referred to paragraph 957 in the preliminary draft, where it was stated that possibilities of new competition were limited to a large extent, particularly at a national level. The possibilities for local companies to establish networks in their home region did however exist at many locations, including if state support had been obtained. It was however not certain

whether such local development was feasible on competitive grounds, as other considerations often took precedence in such development over the consideration of profit. It was difficult to imagine that such development, should it take place, would be more than in just a few low population areas and would hardly change much with respect to market share in the country as a whole. The PTA thus did not expect there to be significant new competition during the lifetime of the analysis.

Míla commented that the PTA analysis did not take into account GR plans for a fibre-optic system with national coverage.

The position of the PTA

The PTA points out that this was general discussion on competition on the market in question and therefore the Míla criticism did not give reason for changing the text.

As stated in the PTA preliminary draft, the Administration does not expect that GR will have a fibre-optic system with national coverage during the lifetime of the analysis, even though GR defined the whole country as its future operational territory. The PTA does however not expect there to be increased competition to any degree because of development of smaller local networks, and in addition to this, GR, Tengir, Snerpa and Austurljós aim for a more modest continuation of development of fibre-optic networks. According to information from Míla it is most likely that most fibre-optic development during the lifetime of the analysis will be from that company.

Míla referred to paragraph 958 in the preliminary analysis where it was stated that the PTA did not expect that the new technology, such as wireless network connections, would be able to replace existing local loops and become a substitute product for them during the period of validity of the analysis.

Míla considered that the PTA had not taken into account that parties to the market were launching 5G systems that could cover the whole country. It was appropriate to point out that Nova had made the decision to rather use its own wireless network. (4.5/5G) in offers to users outside areas where GR had developed fibre-optic, instead of using the Míla Ljósnet/GPON system.

The position of the PTA

5G equipment was first and foremost set up for testing, but there is little experience of functionality and operation of such systems in this country. The PTA does not expect that the impact of 5G technology will be felt to any significant degree until after the period of validity of this analysis. The PTA therefore considers there to be no reason to alter the text. In other respects, the PTA refers to discussion on substitutability assessment over fixed and mobile networks in Sections 3 and 4 and in the revised preliminary draft (Appendix A) and in the same sections here above.

Míla referred to paragraph 959 in the preliminary draft, where it is stated that the limitations and cost for customers as a result of switching between companies, could have a restrictive

impact on competition, particularly when one company was in a dominant market position. In this country the Siminn Group was the only party on the market for many years and was still the only party on the market in large areas of the country. The PTA believed that because of this business history and its extensive business network, Míla had a competitive advantage on this market in this respect.

Míla pointed out that it was now 23 years since the Siminn monopoly in electronic communications had been fully lifted. Míla considered that the success of GR, and not least of other electronic communications companies that offer service in competition with Siminn, demonstrated that the above referenced PTA discussion was incorrect. There was about 15% annual churn today between the Míla fibre-optic systems and GR fibre-optic systems. Míla considered that this was a good indication of how easy it was for retail companies and the public to switch between both retail companies and wholesale companies. Instead of surmising without any data, as the PTA appears to do repeatedly in the analysis, the Administration should call for real information for this market analysis.

The position of the PTA

The PTA considers that the above specified discussion in paragraph 959 is correct and that the Míla criticism does not give reason to alter the text in the paragraph in question. The PTA stands by the assertion that the above specified business history, along with a widespread electronic communications network, provide Míla with a competitive advantage. It is of course the case that a certain proportion of customers switch between companies every year, but this is not to a very significant degree. In a consumer survey that the PTA commissioned in autumn 2020, it came among other things to light that Siminn customers were less likely than the customers of other electronic communications companies to move elsewhere. When the survey was conducted, all Siminn customers in the GR operational territory were for example on the Míla networks.

Míla referred to paragraph 960 in the preliminary draft, where it was stated that competition between companies on the market was generally characterised by a high Míla market share across the whole country. All companies that operated electronic communications services had to rely to some degree on Míla and many had made substantial investments in work and equipment to connect to Míla's systems. To switch service provider could thus be both costly and time-consuming and there was the additional risk that services would be curtailed for some time. Míla thus enjoyed an advantage from having been on the market for a long time and from the fact that many companies had business commitments to Míla. In addition to this, internal sales were very conspicuous, as Siminn was the largest buyer.

Míla asked what was meant by business commitments. It was very easy to cancel service with Míla.

The position of the PTA

Business commitments means, for example varied purchase of services in significant quantities that constitute commitments that result from such varied purchase of services.

GR wished to comment on the PTA assertion that GR extensively used buildings belonging to OR for connection points. Connection points that hosted GR local loops that were used for the company's bitstream service were in buildings owned by OR and by others, and in some instances, they were in premises owned by GR. Today, the proportion was such that [...]% of connection points were in premises owned by OR and [...]% in premises owned by others. As the GR service area grew, the proportion of premises owned by OR was rapidly decreasing.

The position of the PTA

The PTA will rectify the text in its discussion with respect to GR extensively using buildings owned by OR for connection points, as it is more accurate to say that [...]% of connection points are in buildings owned by OR.

8.6 Assessment of SMP on the relevant market (Market 3a)

8.6.1 General

Míla referred to paragraph 965 in the preliminary draft, where it was stated that a company could be designated as having SMP on its own (single dominance) or jointly with another or others (joint/collective dominance). If the conclusion was that one company has SMP then one normally did not need to consider the question of joint dominance. If on the other hand the conclusion is that no company had SMP on its own, then one should examine whether circumstances pertained for joint dominance.

The PTA appears not to have considered the possibility that GR and Míla had joint dominance in the Capital City Area. No discussion could be found on this in the extremely long PTA analysis.

The position of the PTA

As is stated in paragraph 965 in the PTA preliminary draft, a company can be designated as having single dominance or collective dominance.

If the conclusion is that one company has SMP then one normally does not need to consider the question of joint dominance. As the PTA conclusion is that there is substitutability between copper and fibre-optic connections and that there is no reason to segment geographic markets in this country, the analysis shows that Míla is the one company with SMP on the relevant market in this country.

8.6.2 Designation of a company with significant market power

Míla referred to paragraph 966 in the preliminary analysis where it was stated that on the relevant wholesale market, Míla (Siminn Group), GR and Tengir jointly had about 99% market share, and in addition to these parties there was a number of local access networks

where municipalities had taken the initiative to roll out fibre-optic, with state support in most instances. The small local networks had less than 1% combined market share on the relevant market and only offered open access to their fibre-optic local loops (dark fibre). Míla had however been purchasing many of these networks and one could expect this development to continue. There was considerable concentration on the market, where Míla had about 63% market share, GR had about 32% and Tengir just under 5% in mid-2019.

Míla said that, according to the company's information, the market share of parties other than Míla, GR and Tengir was in the range of 2-3% and not 1% as stated here. Míla considered, for example that the Snerpa access network was underestimated in this analysis, and also the municipality networks. Míla also pointed out that simply by decommissioning the PSTN system, the Míla market share would drop below 50%. Today, about 50% of Míla local loops in the countryside were served mostly by copper. It was therefore clear that Míla needed to build a fibre-optic system to be competitive with 5G or fibre-optic networks of other parties, but with the planned increased obligations, this would not happen.

The position of the PTA

PTA quantity figures are based on PTA collection of statistics that are gathered regularly from all operating electronic communications companies in the country, twice a year, various kinds of specialised statistical information, and data from the Administration's infrastructure database (GAF), etc. The above specified figures in paragraph 966 are based on share with respect to connections in use. In the revised preliminary draft, (Appendix A), the numbers will be reviewed with reference to end of year 2020. Given end of year 2020, Míla had 57% market share of the market for local loop lease, GR had 36% and Tengir just over 5%. Countryside networks and Snerpa and Austurljós share about 2% market share.

Here above, the PTA has argued its opinion that the Míla market share will in all likelihood still be over 50% at the end of the lifetime of the analysis, despite the decommissioning of the PSTN voice telephony system and the first steps in the decommissioning of the copper system and the above-mentioned agreement between Siminn and GR. Reference is made to this. According to information from Míla, there will be continuing vigorous activity in the company's fibre-optic rollout during the lifetime of the analysis, much greater than with its competitors.

Míla then refers to further fibre-optic rollout by the company not taking place during the lifetime of an analysis because of the increased obligations announced by the PTA in its preliminary draft. Subsequent to consultation, the PTA on the other hand, decided to retract the intention to impose an obligation on Míla for cost analysed prices for fibre-optic local loops and to prescribe instead an ERT obligation. This change should provide Míla with latitude for continued vigorous fibre-optic rollout.

Siminn stated that the concept "SMP" was the same as a dominant position pursuant to competition law. The definition of a dominant market position could be found in competition legislation and is as follows: "A dominant position is a position of economic strength enjoyed by an undertaking which enables it to prevent effective competition being maintained on the relevant market by giving it the power to behave to an appreciable extent independently of its competitors, customers and consumers."

The PTA discussed in many places in general terms, a dominant position and referred repeatedly in general terms to what the Administration called the main principles of competition law, but entirely omitted to base its discussion and references to the appropriate legal authority to support its discussion.

In the PTA preliminary draft, the following is said on page 51: "It is the main principle in competition law that if market share is over 40% this gives a general indication that the company in question has market dominance and when market share is 50% there have to be very good reasons for this not to apply." Siminn stated that the above referenced assertion is materially incorrect. There was no main principle in competition law that a share of over 40% generally indicated a dominant position.

In a decision by the EU Commission in case no. AT.40099, it was nowhere stated that it was the main principle that market share over 40% generally indicated a dominant market position. On the contrary, reference was made to a judgement of the EU court in case no. C-62/82 (AKZO) where it states in paragraph 60: "With regard to market shares the Court has held that very large shares are in themselves, and save in exceptional circumstances, evidence of the existence of a dominant position (judgement in Case 85/76 Hoffman-La Roche v Commission [...] ECR 461, paragraph 41). That is the situation where there is a market share of 50% such as that found to exist in this case."

Siminn also considered it appropriate to point out that in the USA it was the custom that market share under 50% did not constitute a dominant position, and on the website of the Competition Authority, the FTC, in the USA it states about the concept of dominant position: "Courts do not require a literal monopoly before applying rules for single firm conduct; that term is used as shorthand for a firm with significant and durable market power — that is, the long term ability to raise price or exclude competitors. That is how that term is used here: a "monopolist" is a firm with significant and durable market power. Courts look at the firm's market share, but typically do not find monopoly power if the firm (or a group of firms acting in concert) has less than 50 percent of the sales of a particular product or service within a certain geographic area."

It was thus clear that the main principle in EU competition law was not that market share over 40%, generally indicated a case of market dominance. Even though the share exceeded 50%, this was not irrefutable proof that this was a case of a dominant market position. In the USA, the courts applied that a share under 50% did not indicate a dominant position.

Siminn furthermore pointed out that the EU Commission considered that a dominant position was unlikely, if the share was under 40%, and in the commission guidelines on prioritising cases, the following is stated: "The Commission's experience suggests that dominance is not likely if the undertaking's market share is below 40% in the relevant market."

A company does not suddenly change into a dominant company by going from a 39% share, up to 40%, as the PTA appears to assume. It was thus undisputed that it was not a generally recognised main principle in competition law that market share over 40% constituted a dominant market position.

There was internal inconsistency in the PTA discussion on page 194 in the preliminary draft. When the PTA referred to Commission guidelines, it was clearly stated that market share over 40% did not generally indicate a case of dominant market position. In addition to this, PTA

inconsistency was clear when discussing various companies. GR had over 50% usage of local loops in the Capital City Area and a much higher proportion when one considers only fibre-optic local loops. There were few indications of substitutability between copper local loops and fibre-optic local loops, where both were on offer. The strong position of GR was not significant or conclusive in the opinion of the PTA, but a much weaker position of the Siminn Group on specific markets was talked up to a position of market dominance by the PTA.

Siminn emphasised that assessment of whether there was a dominant market position and assessment of market share should not be conducted in a vacuum without taking into account market share of competitors on the relevant product and geographic market, as the PTA did.

In these cases, within the EU, where companies had been designated dominant with market share in the range of 40-50%, this was because the market share of the next largest party on the market was significantly lower or about 10-15%. If the share of the next largest party was for example 35% under such circumstances, a company with 40-50% share would not be in a dominant position. If a party had comparable market share, it could maintain adequate competitive restraint and thus prevent a company in the range of 40-50% being able to behave without consideration for the market.

In a recent preliminary assessment by the CA, the institution considered that the Siminn share in retail Internet service was 40-45%, while the Vodafone share was similar, i.e. about 35-40%. Such numbers indicated that as the next largest party had a similar share, it had adequate power to provide competitive pressure.

A factor that could have meaning with respect to whether a company was in a dominant position was market development over a long period of time. Also, the entry of new parties to the market and more factors that the PTA ignored in its assessment.

The position of the PTA

Siminn refers to paragraph 196 in the PTA preliminary draft, which is under Section 3.2.6 (Competition on retail markets). The paragraph in question is as follows:

"The Siminn Group's strong position on the retail market, where the company's market share appears no longer to be decreasing and to be strengthening again with just under 50% market share in mid-2019 and on the above specified wholesale markets, strongly indicates that if it was not for wholesale obligations, the Group could operate without concern for competitors or consumers and could continue with access barriers to infrastructure, systems and service. The Siminn market share of the retail market has in reality only decreased by a very few percentage points since the last PTA analysis of the wholesale markets in question in the year 2014 and this share now stands at just under 50%. It is the main principle in competition law that if market share is over 40% this gives a general indication that the company in question has market dominance and when market share is 50% there have to be very good reasons for this not to apply. Despite the entrance of Nova to the market in question in recent times and the merger of Vodafone and 365 in 2017, the Siminn market share has increased somewhat recently. At the same time, however, the company's main competitor, Vodafone, lost significant market share."

In the above specified paragraph, the discussion is first and foremost on market share on a related retail market. As the PTA has answered here before in this document, Siminn had over 46% market share on the retail market at the end of 2020, and there is a likelihood that the

market share will exceed 50% at the end of the lifetime of the analysis because of the agreement between Siminn and GR, all things being equal. The PTA came to the conclusion, after having examined market share of parties and the development, in addition to other factors such as that Siminn and Míla form a vertically integrated electronic communications company, which is by far the largest on the Icelandic electronic communications market and that there is not effective competition on the relevant retail market.

In the opinion of the PTA, the Siminn criticism constitutes an incorrect interpretation of the PTA text in the paragraph 196 in question with respect to the PTA assessment of the significance of 40% market share. The PTA indicates, particularly in its discussion in paragraph 813 in Section 8.2 (market share on Market 3a) in the preliminary draft with respect to market share on the above specified wholesale market, where it states:

"A company's market share is an important factor in market analysis. It is however not the only factor that decides whether a company is designated as having SMP, but it can give strong indications about whether such a situation exists or not. A very significant market share, that is to say over 50%, is generally on its own sufficient according to accepted case law, to designate a company as having a dominant position, except in exceptional circumstances. According to the Guidelines, a suspicion that single dominance exists with one company does not arise until market share has reached at least 40%. This depends, however, on the size of the company in comparison with its competitors. In some instances, a company with market share of less than 40% can be deemed to have SMP. A company with market share of less than 25% would in all likelihood not be considered to have dominance, except in the case where it had joint/collective dominance with another undertaking."

In paragraph 967 in the preliminary draft, under Section 8.6.2 (Designation of a company with SMP) it is stated:

"The general rule is that a company is considered to have a dominant market position if it has more than 50% market share. This is also generally the case with a 40% market share. According to this, the Mila market share is well over the guideline which indicates its SMP on the wholesale market for local access with a fixed connection. Despite the fact that the Mila market share has declined somewhat between analyses, it would be the PTA's view that during the lifetime of the new analysis, Mila would maintain a market share of over 50%. Apart from this, Mila is a subsidiary of Siminn and thus part of the Siminn Group, which forms the largest electronic communications company in the country, and which is vertically integrated and thus operates both at wholesale and retail level."

In paragraph 968 in the preliminary draft, it is stated that there is prima facie evidence for a company with over 50% market share being in a dominant market position.

In the opinion of the PTA, this discussion is not particularly important with respect to assessment of SMP on the relevant wholesale markets, as Míla has around 57% market share on both those markets and the PTA does not expect the outcome to be other than that this will continue to be over 50% until the end of the lifetime of the analysis. The PTA will however harmonise texts in the above specified paragraphs 196 and 967 with the paragraph 813, which is in most accordance with the guidelines of the ESA and the EU.

One can finally indicate comments of the CA, in connection with the additional consultation, opened by the PTA on 30 October 2020. The CA said there among other things, that the PTA planned to apply another of its conditions with respect to demarcation of an area where lighter obligations would apply with 50% Siminn market share instead of 40% as the preliminary draft had allowed for. The CA commented on these planned PTA amendments.

In the CA discussion, it was furthermore stated with respect to the criterion for Siminn retail share, that a company could also be considered to have market dominance in competition law, even if it had less than 50% market share on the relevant market. It was true that there was every likelihood of this, and there was in fact prima facie evidence that a company had market dominance, if it had half of the market share. But there were examples of companies being in a dominant market position with low market share, and in fact all the way down to a 32% share. The CA referred among other things to it having been stated by the EU Commission that a dominant position normally did not occur with market share under 40%. Other factors than market share needed furthermore to be taken into account when assessing market strength.

The CA then referred to "Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings, OJ [...] C 45/7, mgr. 12 og 14". Then it was stated among other things that a dominant market position was not likely, given case law, when market share was under 40%. Then it is stated in the above specified CA comments:

"From the above one can conclude that in competition law, 50% market share is considered generally to constitute prima facie evidence for a company having a dominant market position and the Competition Authority may assume this unless under special circumstances, and then the burden of proof for otherwise is transferred to the company in question, and pursuant to the above specified guidelines from the EU Commission a dominant market position is unlikely if market share is less than 40%. It is furthermore important that factors other than market share are examined when assessing a company's market strength, such as access barriers, economic strength, economy of scope, vertical integration of the company in question and its group, etc."

The CA refers to the Richard Whish publication, *Competition law*, 9th issue pages 191-192. Then the CA stated:

"As the second condition for areas with increased competition is based solely on market share and does not take into account other factors such as access barriers that can be equally important when assessing market strength, the CA cannot agree with the PTA in paragraph 116 in the draft amendment that the Administration has applied rather stringent conditions in the preliminary draft market analysis. On the contrary, it seems, one could argue that the increase of one of the conditions for increased competition on M3a and M3b from 40% market share for Siminn to 50% share is possibly too beneficial for the Group. With reference to these issues, it is probably more appropriate to apply the unchanged 40% Siminn market share when one solely looks at market share to impose lighter obligations on the Group because of the significant market power."

In Appendix C, the PTA will discuss in more detail the above specified comments from the CA, in connection with the Section 6 on criteria for choosing areas where more competition is considered to pertain.

Míla referred to paragraph 967 in the preliminary draft, where it was stated that the general rule was that a company was deemed to have a dominant market position if it had over 50% market share. This situation was also generally the case with a 40% market share. According to this, the Míla market share was well over the guideline which indicated its SMP on the wholesale market for local access with a fixed connection. Despite the fact that the Míla market share had declined somewhat between analyses, it would be the PTA's view that during the lifetime of the new analysis, Míla could maintain a market share of over 50%. Apart from this, Míla was a subsidiary of Siminn and thus part of the Siminn Group, which formed the largest electronic communications company in the country, and which was vertically integrated and thus operated both at wholesale and retail level.

Míla pointed out that the PTA had said: "Despite the fact that the Míla market share has declined somewhat between analyses, it would be the PTA's view that during the lifetime of the new analysis, Míla could maintain a market share of over 50%". Míla considered the PTA needed to conduct analysis/projection on the basis of the very numerous known facts, plans and agreements with respect to the development that was in progress in fibre-optic connections and that would have an impact during the lifetime of the analysis. Simple and unfounded assessment was not enough in the opinion of Míla.

The position of the PTA

The PTA refers to its answers here above with respect to the PTA data and information gathering and the Administration's projections for the lifetime of the analysis.

Míla refers to paragraph 970 in the preliminary draft, where it is stated the PTA considered that there was not efficient competition on the relevant market and that the company's Míla and Siminn (Siminn Group) had SMP on the relevant market, see paragraph 1, article 18 of the Electronic Communications Act. In the light of the above the PTA designated Míla ehf. and Siminn hf. as having SMP on the wholesale market for local access with a fixed connection (Market 3a).

It was Mila's opinion that on the largest part of the market there was effective competition.

The position of the PTA

The PTA refers among other things to Section 8.6.2 in the PTA preliminary draft on designating a company with SMP, and there it is stated that Míla, and thus the Siminn Group, had SMP on the relevant market and that effective competition did not pertain there in the opinion of the PTA. As Míla and Siminn constitute a single economic unit in the understanding of competition law, the PTA considers it normal to designate the Group as such as having SMP, and part of the ERT obligation will rest on Siminn, but all other obligations will rest on Míla.

Nova refers to paragraph 970 in the PTA preliminary draft and agrees with and supports the PTA assessment that on the basis of the analysis of the relevant market, it was the assessment of the Administration, that effective competition did not pertain there and that the companies Míla and Siminn (Siminn Group) had SMP on the relevant market, see paragraph 1, article 18 of the Electronic Communications Act.

The position of the PTA

The Nova assessment is in accordance with the PTA conclusion, to designate the Siminn Group as having SMP.

Míla considered the company did not have SMP on the relevant markets, neither at national level, nor in limited geographic markets, at least where effective competition pertained from GR or Tengir and where it was established that one network operator other than Míla would offer fibre-optic service. Míla placed particular emphasis on the PTA reviewing its preliminary assessment in this respect, so that it would not transpire that obligations were imposed on Míla that did not in reality harmonise with the real position on the market, neither in the relevant area nor elsewhere in the country.

The position of the PTA

As stated in Sections 3 and 4 in the revised preliminary draft (Appendix A), the PTA comes to the conclusion that there is substitutability between copper and fibre-optic local loops. In Section 6, it is stated that the wholesale market for local access with fixed connection shall be defined as one geographic market and the PTA designation takes into account the above specified conclusions, among other things, that there is not effective competition at national level.

Siminn considered that the same discussion on bitstream service in Section 9.6.2 here later, should also apply to the GR local loops in the area, because GR did not offer bitstream service over the Mila system, but only on its own system. GR furthermore did not offer other companies the opportunity of offering bitstream service over its system and there thus should be the same proportion in market share in bitstream connections and local loops. The difference that existed with the PTA was probably because the Administration was taking those connections that were not on the market for Internet service, such as local loops that were used for PSTN service and that would disappear from the market when Siminn closed PSTN connections. There could possibly be a difference between the PTA taking corporate connections with Mila and not doing that with GR. It was at least necessary for the PTA to compare apples with apples when the Administration was using specific market share as grounds. In other respects, Siminn referred to comments from the company that were made with respect to bitstream service in Section 9, as they also applied to local loops.

Siminn also emphasised its prior views that the opening of dark fibre would lead to there being increased incentive for increased competition in bitstream service and that increased capacity and incentives would be created for investments at more locations.

The position of the PTA

One must consider there to be considerable likelihood that the retailer that currently provided households with PSTN voice telephony is likely to move those customers over to their own VoIP. It is not necessarily true that these customers would stop using a land line with the decommissioning of PSTN, although such service is on the decline. Siminn Heimilispakki (Home Package) bore witness to this.

There are still some customers that only have PSTN service, and no Internet service or bitstream on their copper connection. Such customers probably consider their voice telephony service important and might wish to retain it though it is moved to another carrying technology. As previously stated, the PTA considers it normal to include all local loop lease in Market 3a, regardless of whether Internet connections are provided over the line or not, as Siminn collects a line charge regardless of use.

The PTA has furthermore come to the conclusion that there is substitutability between local loops in the form of copper and fibre-optic and that there is no reason to segment geographic markets in this country. Siminn market share was 57% on Markets 3a and 3b at end of year 2020 and 58%. As previously stated, the PTA considers there to be no reason to segment geographic markets. As Siminn refers to the Capital City Area, it should be noted that the Míla market share there at end of year 2020, was about [...]% on Market 3a and about [...]% on Market 3b. The same numbers for Míla market share on the whole of the GR operating territory were [...]% on Market 3a and [...]% on Market 3b. The PTA considers it much more appropriate to target GR area of operation, and not just the Capital City area.

The PTA rejects that only the Míla figures include corporate connections and not the figures for GR. What is meant here is connections to companies that use general home connections.

It could be right when Siminn says that access to GR dark fibre could lead to there being increased incentive for increased competition in bitstream service and that increased capacity and incentives would be created for investments at more locations. On the other hand, the PTA considers there to be no grounds for designating GR as a party with SMP on Market 3a here in this country and the PTA can therefore not impose obligations on the company. In addition to this, such access would first and foremost benefit the party with market dominance, i.e., Míla. Such would not be likely to increase competition on the relevant wholesale market, nor on Market 3b or related retail market.

Siminn said the situation in the Tengir territory was such that it would be useful to consider expected development. It was likely today that Tengir had about 30% bitstream connections in the whole area and about 50% if one took only fibre-optic local loops into account. In the opinion of Siminn, this indicated the direction in which development was going, as fibre-optic local loops would take over from xDSL connections. Siminn considered it dubious if an obligation was imposed for transparency, as only two parties were on the market. If there were in fact conditions for an access obligation (whether it was on Míla or Tengir), it would be important for competition between retail parties not to have too detailed information about the cost base of each other, nor that the competitor knew exactly when the competitor's price changes took place and what they were. An excessively stringent transparency obligation could thus lead to a negative impact on competition.

Today there were no indications that there were competition problems in the Tengir operational territory that would justify intervention by the PTA. It was likely that in the future, the share in local loops would develop such that Tengir would go up to 80-90% market share and possibly the share in bitstream service would be such that Míla and Tengir would have about 40-50%/50-60% each company. It was on the other hand, significant that Tengir had the possibility to exclude Míla from the market, as the owner of the largest fibre-optic network in the area.

The position of the PTA

The PTA considers there to be no leeway to change the obligation for transparency as elaborated in the preliminary draft, for the time being, but the Administration agrees with the Siminn view for a review of the transparency obligation with the objective of it not being too stringent and thus leading to a negative impact on competition, if circumstances on the market changed in the manner indicated by Siminn. The PTA will keep the Siminn comment in mind at the next review of the transparency obligation when analysing the market if the obligation is maintained, subsequent to such a review.

The PTA disagrees with the Siminn assessment that is likely that the Tengir market share in that company's operational territory will increase to 80-90% around the end of the lifetime of the analysis. Tengir distribution plans are rather modest for the coming years, and the company's market share was [...]% on the local loop market in its operational territory at end of year 2020. The PTA does not think that it will increase significantly during the lifetime of this analysis, among other things because of the above specified modest distribution plans, and in addition the PTA considers it certain that Míla will continue to deploy fibre-optic in the operational territory. Míla has for example been doing this in Akureyri, and there are in addition, plans for Siglufjörður in Fjallabyggð. At the same time, Tengir's market share was only [...]% in the company's operating area in market 3b.

Siminn said with respect to areas other than areas of GR and Tengir regarding bitstream service, that it was clear that GR would within 2-3 years offer bitstream service in Reykjanesbær and Árborg. In paragraph 399 in the PTA analysis, it actually says that GR had about 102,000 homes and companies connected at end of year 2019 and intended to increase to 128,000 homes at end of year 2020 and 130,000 at end of year 2021.

This meant that GR intended to deploy 26,000 new fibre-optic connections in 2020 and 2000 in 2021. On the GR website, it states that the company intends to connect 340 homes to its system in Selfoss and 1800 homes in Reykjanesbær in 2020. In 2021 3850 homes would be connected in Reykjanesbær and 680 in Selfoss. This was a discrepancy between PTA and what GR said. GR had also said that at the end of 2023, 90% of the country's homes would have a connection with GR fibre-optic. Given the number of dwellings, this would mean that GR would have deployed fibre-optic to 128,000 homes at end of 2023.

The current area and the published GR plans reached 109,000 homes, which meant that GR had plans to deploy fibre-optic to about 20,000 homes more than the published plans. In the opinion of Siminn one had to take into account where the development in question was to take place and the impact the plans were likely to have on the relevant areas. If these plans were correct, the GR development would probably reach all areas outside the Tengir area.

Siminn considered it clear that these misleading figures about GR development needed to be available in an unambiguous manner about how the situation on the markets would be up to 2-3 years, but PETA figures appeared to indicate that GR intended to roll out fibre-optic almost across the whole country in the coming 2-3 years. If that was correct, this would have enormous significance in the areas where Míla xDSL service was the only option today.

Until this was clear in an unequivocal manner, Siminn could hardly make realistic comments, as they had to be based on the real situation.

The position of the PTA

The PTA agrees with the Siminn thoughts about the importance of numbers being as reliable as possible, but one has, however, to keep in mind that plans for a few years into the future are by the nature of things, dependent on significant uncertainty about precision in each instance, as has clearly come to light in the replies from GR, Míla and Siminn to queries from the PTA with respect to these companies' precise plans for decommissioning the copper network and PSTN service in the coming years. The same can be said about the distribution plans of mobile phone companies with respect to 5G.

The PTA will revise and harmonise statistical information in the revised market analysis draft, in accordance with the newest information that has been gathered in 2020 and will describe the status at end of year 2020.

In GR replies, dated 22 October 2020, to queries from the PTA dated 8 and 9 October last year, it was stated that prior information that the PTA received from GR was not entirely realistic. The fact of the matter is that at the end of 2021, GR expects to have deployed fibre-optic to [...] homes and companies, [...] at the end of 2022 and [...] at the end of 2023. It is therefore clear that the GR fibre-optic rollout will be relatively modest during the lifetime of the analysis, given the extensive rollout in recent years. It is unlikely that the company's fibre-optic rollout will reach outside the south-west corner of the country during the lifetime of the analysis. It is however not inconceivable that the company [...], but this will not have an impact on Market 3a, rather Market 3b.

9 Analysis of SMP on the wholesale market for central access provided at a fixed location for mass-market products (Market 3b)

9.1 Introduction

GR said that it supports the PTA intention to maintain designation of Míla as having SMP on Market 3b.

The position of the PTA

The GR opinion is in accordance with the PTA conclusion, to designate the Siminn Group as having SMP on Market 3b.

Tengir made no comment on the PTA intention to maintain designation of Míla as having SMP on Market 3b.

The position of the PTA

The Tengir opinion is in accordance with the PTA conclusion to designate the Siminn Group as having SMP on Market 3b.

Nova agreed with the PTA that there were still strong indications of Míla SMP, though the company's market share had slightly decreased. There had been significant growth for Míla in rollout of fibre-optic and in Siminn TV service, which was driven forward with extensive, and in the opinion of Nova, partly unlawful Siminn marketing actions, among other things in the Home Package bundle, free offers and English football. In this way, both TV content, such as English football, and mobile phone service were used in a crude manner for this purpose, as one could clearly deduce from the CA conclusions as a whole in Decision no. 25/2020.

Míla was the only company that operated a bitstream service with national coverage, which greatly facilitated Siminn sale of retail products, particularly Home Package, and its growth was recounted in detail in the above specified CA decision.

Nova therefore supported the PTA plans to maintain PTA designation of Míla as a company with SMP and to impose appropriate obligations on the company.

The position of the PTA

The Nova opinion is in accordance with the PTA conclusion to designate the Siminn Group as having SMP on Market 3b, despite the fact that Mila's market share has declined slightly in recent years. Siminn's market share, however, has not decreased in the same way.

Míla referred to paragraph 985 in the preliminary analysis where it was stated that Míla broadband connections had mostly been on an xDSL system over copper local loops in recent

years. Since the publication of the last analysis there have been some changes in the offer of technology that can be used to carry bitstream. Both fibre-optic and the VDSL system have established themselves on the market in recent years. For this reason, potential substitutability in broadband connections of the fibre-optic network and the VDSL standard had been examined and the Decision was reached that this substitutability did exist in certain areas but that other possible substitute possibilities for broadband access were not sufficient. The PTA assumed that there were on the one hand broadband connections through the xDSL system on copper local loops and on the other hand fibre-optic that formed the wholesale market through bitstream access.

Míla said that Míla xDSL connections had decreased by about 35,000-40,000 since 2015. It was therefore something of a contradiction to say that VDSL connections had "established themselves in recent years". On the contrary, they were on a steady decline.

The position of the PTA

The PTA plans to change the text in paragraph 985 in the following manner in accordance with the Míla comments: After the sentence: "Both fibre-optic and the VDSL system have established themselves on the market in recent years." there will be the sentence: "After a significant increase in VDSL connections that reached a peak in 2015, they have decreased to a significant degree since then, i.e. from 113,884 the end of 2016 to 69,608 at the end of 2019. The data that the PTA has, indicates that the speed of the decline has somewhat decelerated in 2020, compared to e.g., in 2019."

9.2 Market share

GR agreed with the PTA views with respect to the Míla dominant market power. GR considered that there was nothing to indicate that the Míla market share would diminish to any significant degree during the lifetime of this analysis such that this would have a significant impact on the company's market strength and dominant position on Market 3a or 3b. Míla has rather increased its effort with respect to deployment of fibre-optic networks, and it is therefore clear that the company intends to strengthen its position technically and thus its market power.

The position of the PTA

This above specified GR comment is in accordance with the PTA conclusions. As has been explained in detail before in this document and as will be presented in the revised preliminary draft (Appendix A), the PTA considers that the Míla market share will probably not fall below 50% on Markets 3a and 3b at the end of the lifetime of this analysis.

Nova referred to paragraph 1000 where it was stated that the best way to give a realistic picture of the position and strength of parties on the bitstream market was to use the number of connections in use as a basis for calculating market share in wholesale, rather than turnover figures. Nova considered it questionable to compare the revenue side, as the same bitstream services were not included in the access charge. In this way, there was no bitstream service included in the GR access charge, but Internet bitstream service was included in the Míla

access charge and not possible to separate in purchase. It was therefore quite surprising how low a price Míla could offer for access, and in addition how high the Siminn markup was on the access charge to customers.

Nova then referred to paragraph 1002 where it was stated that the PTA considered that bitstream service over GR fibre-optic local loops exerted competitive pressure on Míla bitstream service, both with respect to VDSL over copper local loops and bitstream service over fibre-optic local loops. Míla agreed that the choice between Míla and GR created competition and therefore pressure on price. It was however quite surprising how much and price difference there was between bitstream services in wholesale (with an access charge). Despite the big difference, the Siminn price in retail was often somewhat higher than those of competitors. This indicated high markup by Siminn on the service, which indicated that Míla was losing revenue that Siminn was receiving at Míla's cost.

With respect to paragraph 1007, where it was stated with respect to the Míla position in the Capital City Area and at other locations where the GR access network was in place, Míla had in recent months strengthened its competitive position in the area with very extensive rollout of its own fibre-optic network, and to 1008, where it was stated that the PTA expected that despite increased supply from competitors, the Míla position on the market would continue to be strong during the lifetime of the analysis, and Míla agreed with the PTA assessment on the strong Míla position. The numbers about the Siminn/Míla growth in fibre-optic gave a clear picture of the strength of the entry into the market. In this development, Siminn was gaining customers despite renewing connections with existing customers. The development of other parties in fibre-optic networks therefore did not seem to diminish Siminn's growth.

The position of the PTA

The above specified Nova comment is in accordance with the PTA conclusion. The PTA particularly agrees with Nova that the development by parties other than Mila in fibre-optic networks appeared not to diminish Siminn market share to any significant degree.

The PTA is conscious about the Siminn markup on access charges (line charge) and considers that this fact strengthens the Administration's assessment of the strong position of Siminn on the retail market and of the limited competition in place.

Vodafone referred to paragraph 1001, where among other things, it was stated that the Vodafone share had declined very significantly on the wholesale market for fixed access since the last market analysis, i.e. from about 13% to just under 2% in mid-2019, and the company had mostly decommissioned its ADSL system in recent years and instead had leased bitstream connections from GR. Vodafone stated that the Vodafone share had declined subsequent to Mila having configured local loops in street cabinets and not in telephone exchanges. Then it had not been possible for Vodafone to get space for xDSL equipment in Mila street cabinets. It was important that this was stated. Vodafone had complained to the PTA and the case had taken many years. During that time, the Vodafone market share had decreased significantly.

The position of the PTA

The above comment describes the reasons for the significant reduction in market share, that the PTA explained in the paragraph 1001 in question, as Vodafone sees them. The PTA can

agree with them in most respects and will revise the paragraph in question in the revised preliminary draft (Appendix A).

9.3 Total size and profitability

Nova says that it would be appropriate to keep in mind that Siminn was registered on the stock exchange and 15 of 20 largest shareholders in Siminn were Icelandic pension funds. Such relationships could for example have an impact on access to capital.

The position of the PTA

The above specified Nova comment is in accordance with the PTA conclusion. It is stated in paragraph 1021 in Section 9.3, that discusses total size and profitability of the Icelandic electronic communications network that Siminn and Vodafone are mostly owned by Icelandic pension funds. For this reason, the PTA sees no reason to revise the text in that paragraph because of the above specified comments from Nova.

Míla referred to paragraph 1021 in the preliminary draft, where it was stated that the PTA assessment that GR did not in a direct manner enjoy the financial strength of its owner, OR, more than other electronic communications companies from their owners, e.g., from pension funds which are the main owners of Siminn and Vodafone.

Míla said that here the PTA did not mention that GR had breached the PTA conditions on funding, and this had not come to light until a few years later. In this manner, GR was precisely enjoying the strength of its owner and the gains from its breaches. The PTA had not imposed any penalties on GR because of this breach and Míla was not aware of whether GR had rectified that situation.

The position of the PTA

The PTA refers among other things to its Decision no. 3/2019 "Implementation of financial separation with Gagnaveita Reykjavíkur ehf. for the years 2016-2017".

The decision was part of the PTA surveillance of the implementation of financial separation of GR within the OR Group on the basis of article 36 of the Electronic Communications Act. The investigation covered the period 2016-2017 and was based on bookkeeping and operations data for these years. It was the main conclusion of the PTA that financial separation between OR and GR was in accordance with the provisions of article 36 of the Electronic Communications Act, with the exception of the provision of a loan to GR in connection with a cash pool of the OR Group. The PTA also commented on the provisions of credit institutions in loan agreements with GR with respect to OR ownership of GR. The PTA therefore considered there to be no reason to impose obligations on GR for implementation of financial separation between OR and GR with respect to the above specified issues.

In its prior decisions, the PTA had also imposed various obligations on GR to ensure the financial separation in question and one can in this connection indicate PTA decisions from 13 November 2006 no. 32/2008, no. 14/2010, no. 25/2010, no. 39/2010, no. 2/2014, and no.

11/2015. The Appellate Committee for Post and Telecommunications furthermore ruled on 21 December 2006, 27 August 2007, no. 3/2010 and no. 5/2014.

The PTA plans in 2021, to investigate the financial separation between GR and OR for the years 2018-2020.

The PTA has no authority in law to impose penalties on GR for breaches, other than general per diem fines. ESA is now processing a complaint from the Siminn Group about alleged unlawful state aid in connection with GR behaviour, which was described in the above specified PTA Decision no. 3/2019. In the event of there having been unlawful state aid, GR will probably be required to repay it.

9.4 Entry barriers

9.4.1 General comments on barriers to entry

Míla referred to paragraph 1024-1028 in the preliminary draft.

The position of the PTA

The comments from Míla and Siminn are mostly identical with respect to access barriers on Markets 3a and 3b and reference is made to the PTA answer to Míla comments with respect to paragraphs 845-849 in the preliminary draft in Section 8 here above.

9.4.2 Control of infrastructure that is difficult to duplicate

Míla referred to paragraph 1029-1038 in the preliminary draft.

The position of the PTA

The comments from Míla and Siminn are mostly identical with respect to access barriers on Markets 3a and 3b and reference is made to the PTA answer to Míla comments with respect to paragraphs 850-860 in the preliminary draft in Section 8 here above.

9.4.3 Sunk costs

Míla referred to paragraph 1039-1043 in the preliminary draft.

The position of the PTA

The comments from Míla and Siminn are mostly identical with respect to access barriers on Markets 3a and 3b and reference is made to the PTA answer to Míla comments with respect to paragraphs 861-866 in the preliminary draft in Section 8 here above.

9.4.4 Economy of scale

Míla referred to paragraph 1044-1049 in the preliminary draft.

The position of the PTA

The comments from Míla and Siminn are mostly identical with respect to access barriers on Markets 3a and 3b and reference is made to the PTA answer to Míla comments with respect to paragraphs 867-873 in the preliminary draft in Section 8 here above.

9.4.5 Economy of scope

Míla referred to paragraph 1050-1061 in the preliminary draft.

The position of the PTA

The comments from Míla and Siminn are mostly identical with respect to access barriers on Markets 3a and 3b and reference is made to the PTA answer to Míla comments with respect to paragraphs 874-886 in the preliminary draft in Section 8 here above.

9.4.6 Access to capital

Nova says in connection with paragraph 1065, that it would be appropriate to keep in mind that Siminn was a that 15 of 20 largest shareholders in Siminn were Icelandic pension funds. Such relationships could for example have an impact on access to capital.

The position of the PTA

This Nova comment is in accordance with the PTA conclusion.

Míla referred to paragraphs 1062-1070 in the preliminary draft.

The position of the PTA

The comments from Míla and Siminn are mostly identical with respect to access barriers on Markets 3a and 3b and reference is made to the PTA answer to Míla comments with respect to paragraphs 887-895 in the preliminary draft in Section 8 here above.

9.4.7 Barriers to expansion

Míla referred to paragraphs 1071-1077 in the preliminary draft.

The position of the PTA

The comments from Míla and Siminn are mostly identical with respect to access barriers on Markets 3a and 3b and reference is made to the PTA answer to Míla comments with respect to paragraphs 897-901 in the preliminary draft in Section 8 here above.

9.4.8 Sales and service systems

Míla referred to paragraphs 1078-1084 in the preliminary draft.

The position of the PTA

The comments from Míla and Siminn are mostly identical with respect to access barriers on Markets 3a and 3b and reference is made to the PTA answer to Míla comments with respect to paragraphs 902-908 in the preliminary draft in Section 8 here above.

9.4.9 Vertical integration

GR considered the PTA needed to investigate even more and to better assess the impact of vertical ownership of Míla and Siminn on the SMP status of both companies. There was no doubt whatsoever that both Míla and Siminn, as a company group, had SMP on the wholesale markets on the one hand and on retail markets on the other. GR also referred to analysis by the CA in support of this, with respect to the overall dominant position of the Siminn Group. With the market power held overall by the vertically integrated group, one did not only consider individual markets when assessing market power, but also other markets that could have an impact on that assessment. It could be thus clearly seen that companies within the Siminn Group had SMP on all markets on which the companies operated.

One could furthermore point out the large number of competition problems stemming from the vertical integration among other things that were discussed in the draft. Part of the purpose of imposing obligations on electronic communications companies with SMP, pursuant to article 27 of the Electronic Communications Act, see article 18 of the same act, was to assure efficient and equal competitive conditions. GR considered that insufficient attention was given to these factors in the market analysis and that an assessment had not been made of the impact of the vertically integrated connections between Míla and Siminn and their impact on Míla SMP. One could in this context, among other things, mention internal transactions between these companies, and unwillingness of both companies to provide other parties to the market with service etc. The large number of disputes related to the companies, both with the PTA and the Competition Authority, related in one way or another to measures or actions taken by the companies on competitive markets. It was important that further analysis and investigation should lead to obligations that the PTA had authority to impose on Míla pursuant to the law, that tackled in a targeted manner, the problems with which the market had struggled in recent years.

The position of the PTA

The opinion of GR is in accordance with the PTA conclusion on vertical integration of the Siminn Group and with respect to the Siminn Group's dominant overall position. The PTA agrees with the GR opinion, that one must take into account the position of the Group as a whole.

With the market power held by the vertically integrated group, one did not only consider individual markets when assessing market power, but also other markets that could have an impact on that assessment.

The PTA considers that with the obligations that the intention is to maintain, and/or impose on the Siminn Group, the issues mentioned above by GR, are among other things taken into account, and thus there should be no reason to make more detailed analysis of the impact of

vertical integration within the Group. The PTA does however note that in Sections 10.2 and 11.2 in the revised preliminary draft (Appendix A) there are explanations regarding potential and real competition problems that the PTA has identified on the relevant markets, and reference is made to this. Many of them are precisely related to vertical integration of the Siminn Group. It should also be noted that after the initial draft market analysis was published for national consultation on 30 April 2020, GR and Siminn reached an agreement in July 2020 on Siminn's entry into GR's fibre-optic network in the form of bitstream access. In the opinion of the PTA, this agreement somewhat reduces the harmful effects that the Siminn Group's vertical integration has caused, although in the PTA's opinion these effects are still significant.

Míla referred to article 1087 in the preliminary draft where it was stated that despite the fact that Míla only handled wholesale services and Siminn both wholesale and retail, this did not alter the fact that these two companies together formed a vertically integrated company group. Siminn was by far Míla's largest customer as sales to Siminn represented over 70% of Míla's revenue. DSLAM equipment was located at Míla, like the local loop system, and Siminn leased access to local loops and bitstream access from Míla. As both companies were part of the Siminn Group, ownership, management and financial connections between the companies were undisputed, but jointly they form a single economic entity in the understanding of competition law.

Míla noted that GR and OR were a single economic entity in the understanding of competition law, but the PTA appeared to completely ignore this. It was appropriate to point out that the CA had asserted that Míla and Siminn were not a single economic entity, precisely because of the conditions and limitations imposed by the Settlement on the companies. See almost identical criticism from the companies, with respect to paragraph 911 in the preliminary draft.

The position of the PTA

The PTA considers there to be no need to change its discussion on this issue in paragraphs 911 and 1087. The discussion there is about the Siminn Group. Discussion on GR can be found at many locations elsewhere in the analysis, and on the relationship of that company with OR. This does not change the fact that the Siminn Group is a single economic entity in the understanding of competition law, and thus in this analysis.

The PTA emphasises that the Administration applies electronic communications legislation in its analysis, and this shall be taken into account. The PTA is not aware of an instance where the CA has asserted that the Siminn Group is not a single economic entity in the understanding of electronic communications legislation and the CA has made no comments on this in this analysis, nor in previous analyses. One must therefore consider that the CA agrees with this PTA position.

9.4.10 Conclusion concerning entry barriers in the relevant market

Tengir said that it agrees with the PTA conclusion that there were access barriers for new companies entering the relevant wholesale market, which strengthened the position of Míla on the relevant market and weakened the position of other smaller companies such as Tengir.

The position of the PTA

The Tengir opinion is according to the PTA conclusion on access barriers.

Nova referred to paragraph 1099 in the preliminary draft where it was stated that entry barriers existed for new companies entering the relevant wholesale markets, which strengthened Míla's position on the relevant market. Nova agreed with the PTA view, and added that access to, for example, the NATO ring constituted an advantage for Míla., which was very limiting and inhibiting for others to compete with. One of the prerequisites for more competition, was access for others to such a network without mediation from Míla, and such could support more economic transit over long distances (simpler trunk lines).

The position of the PTA

This Nova comment is in accordance with the PTA conclusion on access barriers and is in accordance with comments from other competitors of Míla, such as GR.

9.5 Competition problems on the market in question

9.5.1 Customer countervailing buying power

Míla furthermore considered that electronic communications companies other than Siminn were not large users of Míla fibre-optic network in those areas where there was competition from GR or Tengir. In other words, the electronic communications companies had a real choice between wholesale operators in the relevant areas and seemed furthermore not to hesitate to purchase access to service over networks of Míla competitors, in order to provide service to the majority of their customers. Míla could not offer fidelity and quantity discounts like GR did in the shelter of there being no obligations imposed on that company, despite the fact that GR had about 60-65% market share at a national level in fibre-optic connections.

It was the Míla assessment, see also the AM conclusions, that this analysis of behaviour of customers in wholesale, i.e., to whom electronic communications companies would turn, was a fundamental issue when assessing whether Míla could be considered a company with SMP on the defined market. The fact that unrelated electronic communications companies purchased mainly service from Míla competitors in those areas where there was competition from GR or Tengir, supported the contention that Míla could not be deemed to have SMP, in these market areas.

In the Analysys Mason report in Section 2.4 on page 6, it states that service providers other than Siminn seem to have chosen Míla competitors for the majority of the customers and only a small proportion of customers of Míla bitstream service, where GR and Tengir offered their FTTH service. This division of business at wholesale level needed to be taken into account when assessing SMP and the obligations chosen, and whether consumers benefited from these obligations.

The position of the PTA

Siminn has had a good offer in retail Internet service and has used its IPTV service to maintain this, as can be seen in the prior comment to the effect that it is Siminn customers that are now moving from VDSL systems over to the Míla fibre-optic system. Other retailers, that do not have the same offer at their disposal, may have presented a fibre-optic network as their first choice. This choice, however, has not led to Siminn having lost market share to any significant degree in recent years, and the company had more than 46% market share in end of 2020.

Vodafone and Hringdu have purchased wholesale service from Míla in significant volumes, while Nova has purchased less. Siminn, which is by far the largest retailer in the country, purchases about 83% of Míla's bitstream services, which means that other parties purchase 17%. GR has no guarantee that the companies in question will not transfer their custom increasingly to Míla during the lifetime of the analysis. [...]

In the opinion of the PTA, it is among other things a consequence of the strong position of the Siminn Group, and the fact that Míla and Siminn are vertically integrated, that service providers competing on the retail market with Siminn, should rather choose competitors of the Group in wholesale transactions. This has however not led to Míla no longer having SMP, as has been stated here above and in Sections 8 and 9 of the updated initial draft (Appendix A). It is however totally unclear how heavy this issue will weigh, and come to weigh, in the choices these parties will make in the future.

Míla referred to it being the view of the company, see also the AM report, that Siminn did not have the greatest share of electronic communications companies in retail fibre-optic. It seems that this is not least the case in competitive areas where there is more than one fibre-optic network. According to available PTA information, Siminn had 33% share in retail for fibre-optic, while Vodafone had 36%. According to information in the AM report, Siminn had about [...]% market share in competitive areas where Míla and GR or Tengir were operating. This appears in the Analysys Mason report in Section 2.5 on page 7.

The position of the PTA

The PTA reiterates that the Administration comes to the conclusion that there is still substitutability between copper and fibre-optic networks, and connections on such networks. This means that there is not a separate fibre-optic market in this country, nor segmented geographic markets.

Vodafone has about a 12-year history of offering service over GR fibre-optic. Siminn and Míla did not offer fibre-optic connections to any significant degree before the year 2016. In mid-2020, Siminn had become the largest retailer if one only looks at connections over fibre-optic, with 34.1%, and had increased from 22.1% in two years. This must be considered a very good result in such a short space of time. In the latter half of 2021 it is expected that Siminn will commence sale of its service on the GR fibre-optic network and negotiations have been taking place on the entry of Siminn into the Tengir network. One can therefore expect the Siminn advantage to increase during the lifetime of the analysis, whether one considers connections over copper or fibre-optic networks or connections on both copper and fibre-optic networks.

Movement on the retail market appears to indicate that fidelity with the underlying fibre-optic network is not a major factor in the decision to purchase.

9.5.2 Conclusions on competition on the relevant market

Nova referred to paragraph 1127 and agreed with the PTA that countervailing buying power against Míla was very little. There were very limited choices for doing business and an economic model for entering the market was not on offer.

The position of the PTA

This Nova comment is in accordance with the PTA conclusion.

9.6 Assessment of SMP on the relevant market (Market 3b)

9.6.1 Designation of a company with significant market power

Nova agreed with the assessment and conclusion of the PTA with respect to designating Míla and Siminn (Siminn Group) as companies with SMP.

The position of the PTA

This Nova comment is in accordance with the PTA conclusion.

Síminn emphasised that [...]

Today, GR had over 50% share in bitstream service and Míla therefore probably less than 50%, as there was only one party in the picture. [...]

There were no indications or data that supported the assertion that Míla could be in a dominant position on the market for bitstream service. Siminn indicated a number of facts to support its contention.

GR had a contiguous fibre-optic system which reached the whole of the Capital City Area, and even far beyond. Míla did not. Electronic communications companies did not consider that there was substitutability between fibre-optic and xDSL service, and it seemed that consumers were of the same opinion. If Míla were to increase the price of its service, then electronic communications companies could realistically move their offer entirely over to GR.

The PTA belief that Míla could gain customers from GR and subsequently increase prices was unrealistic, unfounded and not based on any data. It was neither likely nor realistic that this would be possible. On the contrary, Míla could not match GR offer of service, as it did not have the same offer of fibre-optic. PTA conjectures about Míla's capability of conducting itself without consideration for GR, were, unrealistic and unfounded.

The fact that most electronic communications companies chose GR was a strong indication of the company's position on the market and at the same time was an indication of how unlikely it was that the PTA conjecture on Míla's strength was right.

In the opinion of Siminn, the GR position was developing towards the company increasing its share and increasing its prices, such that the company could be deemed to be in a dominant position. The PTA needed to look at the development during the last 3-6 years, and to use those statistics for the purpose of projecting likely development. The PTA had not done this. The Administration, for example, totally ignored GR repeated price increases in recent years.

A new party that entered the market thus rather chose GR, as GR could guarantee fibre-optic in a much broader manner than Míla, and in parallel with this, simplicity in operations as one only needed equipment that was compatible with fibre-optic and not a mixture of operation between xDSL and fibre-optic. For proof to this effect, reference was made to Nova and to the fact that most of Hringdu customers were on fibre-optic.

Parties could then position themselves on the Míla system and offer other parties bitstream service over Míla systems and it was known that Símafélagið had done this. There was however no discussion about the operations of these parties, but it was noted that Vodafone had been discontinuing its bitstream service and had moved itself over to the GR system.

The situation is such that GR was the only company that could offer comprehensive bitstream service over its system, while no other company could do this as GR had not offered access to dark fibre. That was where the problem lay on the market for the future - which the PTA maintained deliberately - not in the offer or service of the Siminn Group.

Because of this arrangement, GR would increase its strength in bitstream service over the coming 2-3 years which would probably be an irreversible development, which the PTA had expressly emphasised should happen.

The position of the PTA

As is stated here above, the wholesale market for central access at a fixed location for mass-market products, which is here under discussion is defined as one geographic market. This is the whole country, not individual areas such as for example the GR distribution territory, and the PTA analysis takes this conclusion into account.

It is furthermore the PTA conclusion that there is substitutability between VDSL service and bitstream service over fibre-optic local loops. Míla market share at the end of 2013 was 65% and 57% at the end of 2020 and has therefore only decreased by 8% in 7 years. In the opinion of the PTA, Míla's market share is likely to remain at over 50% during the lifetime of the analysis, i.e., over the next 2-3 years. The total size and profitability of the Siminn Group far exceeds that of competitors on the electronic communications market, and in addition to this, entry barriers exist.

With regards to substitutability between copper and fibre-optic, this is discussed in Sections 3 and 4 here above in the same sections in the revised analysis (Appendix A) and in Appendix C. A chain of substitutability does not have to be equally active in both directions for substitutability to exist. This indicates that consumers do not see such a difference in quality between VDSL and FTTH connections for sellers see a revenue opportunity in such a difference.

In the opinion of the PTA, there are still strong indications of SMP of the Siminn Group, even though the company market share has declined slightly in recent years.

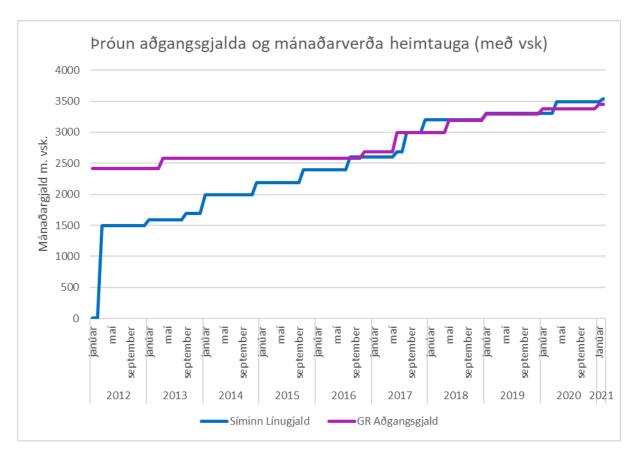
The PTA points out that there are still significantly more xDSL connections in the Míla copper network in use, rather than bitstream connections on the Míla fibre-optic network, or 64% against 34%, despite the company's major fibre-optic rollout that has been driven forward with extensive Siminn marketing measures.

Míla is furthermore the only country operating bitstream service with national coverage, which facilitated Siminn retail sales, particularly the Home Package.

Siminn referred to the fact that there were negotiations ongoing with GR on the entry of Siminn into the GR fibre-optic network, and that this should have an impact on the PTA projection for development in GR connections. An agreement between Siminn and GR was reached in July 2020, and here above the PTA has answered related comments, and refers to that.

With respect to the Siminn comment that the PTA theory did not hold that Míla could gain customers from GR and subsequently increase prices, reference is made to the PTA reply later in this document in Section 10.2 where comments are replied to that relate to competition problems. The PTA however reiterates, as has previously been stated in this document, that there has been significant drop-out from the GR fibre-optic network over to both copper and fibre-optic with Míla in recent years, particularly since 2018. It is furthermore clear that the Míla fibre-optic network has expanded rapidly in the GR operational territory and the PTA does not expect otherwise than that this will continue throughout the lifetime of this analysis, and that there will be an insignificant difference between the fibre-optic distributions of the companies in this area at the end of the lifetime of the analysis. Though most other service providers, except Siminn, had until this point in time, most of their business with GR in that company's operational territory, there is nothing guaranteed for GR during the lifetime of the analysis. Reference is made to prior answers in this document in this connection.

With respect to Siminn discussion on GR increasing prices such that the company could be considered to have a dominant position, one can see here below the price development for GR access charges and the Siminn line charge, subsequent to their imposition.



In the opinion of the PTA, this figure illustrates how GR had rather delayed price increases until Siminn had increased the line charge significantly (which had at first only been for access to copper local loops) until that line charge was higher than the GR access charge. From 2016, increases had kept in step or alternated between Siminn and GR.

10 Conclusion on SMP on the wholesale market for local access with fixed connection (Market 3a)

The Competition Authority (the CA) said that it agreed with the PTA about the obligations that the Administration intended to impose on Míla on the relevant wholesale markets in the preliminary draft.

The position of the PTA

The above position of the CA is in accordance with the PTA conclusion that there is not effective competition on the retail market for broadband connections in this country, that Míla has SMP on the relevant wholesale markets and that obligations need to be applied to endeavour to increase competition on the relevant wholesale market, downstream wholesale market (Market 3b) and on the above specified retail market, for the benefit of consumers.

The CA was thus declaring its agreement with the obligations the PTA planned to impose on Mila in its preliminary draft, on which there was consultation from 30 April until 10 July 2020. Among other things, there was a new obligation on a cost-oriented tariff for Mila fibre-optic, which was not subject to price control in the market analysis in force from 2014. As has previously been stated, the PTA opened an additional consultation on 30 October 2020 on specific amendments to previously planned obligations, among other things with respect to the cost-oriented tariff for Mila fibre-optic. The CA submitted comments in that consultation, which will be covered in Appendix C, along with the PTA position on these comments. There will also be a more detailed discussion on the above specified obligations later in this document in Sections 10 and 11 and in the same sections in the revised analysis (Appendix A).

GR stated that it agreed with the PTA plans for imposition of those obligations on Míla on Market 3a that were presented in the preliminary draft.

The position of the PTA

The above position of GR is in accordance with the PTA conclusion that there is not effective competition on the retail market for broadband connections in this country, that Míla has SMP on the relevant wholesale markets and that obligations need to be applied to endeavour to increase competition on the relevant wholesale market, downstream wholesale market (Market 3b) and on the above specified retail market, for the benefit of consumers.

GR was thus declaring its agreement with the decisions the PTA planned to impose on Míla in its preliminary draft, on which there was consultation from 30 April until 10 July 2020. Among other things, there was a new obligation on a cost-oriented tariff for Míla fibre-optic, which was not subject to price control in the market analysis in force from 2014. As has previously been stated, the PTA opened an additional consultation on 30 October 2020 on specific amendments to previously planned obligations, among other things with respect to the cost-oriented tariff for Míla fibre-optic. GR submitted comments in that consultation, which will be covered in Appendix C, along with the PTA position on these comments. There will also be a more detailed discussion on the above specified obligations later in this

document in Sections 10 and 11 and in the same sections in the revised analysis (Appendix A).

Tengir said that it agreed with the PTA on those plans presented in the preliminary draft for maintaining the obligations that were imposed on Míla on Market 3a, as they were both normal and necessary in the opinion of Tengir. Tengir also expressed support for PTA plans for imposition of wider obligations on Míla.

The position of the PTA

The above position of Tengir is in accordance with the PTA conclusion that there is not effective competition on the retail market for broadband connections in this country, that Míla has SMP on the relevant wholesale markets and that obligations need to be applied to endeavour to increase competition on the relevant wholesale market, downstream wholesale market (Market 3b) and on the above specified retail market, for the benefit of consumers.

Tengir was thus declaring its agreement with the obligations the PTA planned to impose on Míla in its preliminary draft, on which there was consultation from 30 April until 10 July 2020. Among other things, there was a new obligation on a cost-oriented tariff for Míla fibre-optic, which was not subject to price control in the market analysis in force from 2014. As has previously been stated, the PTA opened an additional consultation on 30 October 2020 on specific amendments to previously planned obligations, among other things with respect to the cost-oriented tariff for Míla fibre-optic. Tengir did not submit comments in that additional consultation, and the above specified amendments will be discussed in Appendix C, along with the PTA position on these comments. There will also be a more detailed discussion on the above specified obligations later in this document in Sections 10 and 11 and in the same sections in the revised analysis (Appendix A).

Nova thought that it went without saying that obligations on Míla should be more wide reaching than obligations currently in force, particularly with respect to all aspects relating to fibre-optic (tariff, ducts and conduits and other such issues).

The position of the PTA

The above position of Nova is in accordance with the PTA conclusion that there is not effective competition on the retail market for broadband in this country, that Míla has SMP on the relevant wholesale markets and that obligations need to be applied to endeavour to increase competition on the relevant wholesale market, downstream wholesale market (Market 3b) and on the above specified retail market, for the benefit of consumers.

Nova was thus declaring its agreement with the obligations the PTA planned to impose on Míla in its preliminary draft, on which there was consultation from 30 April until 10 July 2020. Among other things, there was a new obligation on a cost-oriented tariff for Míla fibre-optic, which was not subject to price control in the market analysis in force from 2014. As has previously been stated, the PTA opened an additional consultation on 30 October 2020 on specific amendments to previously planned obligations, among other things with respect to the cost-oriented tariff for Míla fibre-optic. Nova submitted comments in that consultation,

which will be covered in Appendix C, along with the PTA position on these comments. There will also be a more detailed discussion on the above specified obligations later in this document in Sections 10 and 11 and in the same sections in the revised analysis (Appendix A).

Míla stated that it was the company's assessment that it was not necessary to impose obligations on Míla, as the company was not deemed to have SMP in the understanding of paragraph 2 of article 17 of the Electronic Communications Act, as effective competition did exist in by far the largest part of the market and the necessity for such obligations in other market areas had not been demonstrated. For this reason, the obligations that Míla had borne should rather be withdrawn than increased.

The position of the PTA

The PTA disagrees with Míla that the company does not have SMP on the relevant wholesale market and that it was not necessary to impose obligations on the company. The PTA is precisely obliged to impose appropriate obligations on companies in such a position. With respect to this conclusion, reference is made to Section 8 here above and to the same section in the revised analysis (Appendix A). The PTA then refers to Section 6 here above and to the same section in the revised analysis with respect to the conclusion that it is not considered necessary to segment separate geographic markets in this country. With respect to the Míla comment that obligations should rather be lightened than increased, reference is made to replies here later in this Section and to Section 10 in the revised analysis (Appendix A) and in Appendix C.

Míla said that even though the conclusion would be that some company was designated as having SMP on specific local markets, this on its own did not suffice for there to be authority to impose obligations on the company on the relevant market, see case of ANACOM in Portugal (PT/2016/1888-1889). In that case, access to fibre-optic was entirely on commercial grounds.

Under those circumstances, the NRA was obliged as before to always assess conditions on the relevant market, with respect to potential competition problems that might be found there if such obligations were not in place, and then to assess the scope of these problems, in accordance with possible obligations.

In this connection, it was a fundamental issue for the NRA that a position be adopted on what the objective of the relevant obligations was, taking into account the increasing of competition. If they were not conducive to achieving their objectives, they could neither be considered necessary nor to the advantage of electronic communications companies or end users, see also the above referenced case from Portugal.

In an AM report it was stated that conditions in Iceland were in many respects comparable with the conditions that had been described in the previously referenced case from Portugal, where it had not been considered necessary to impose obligations on fibre-optic in areas with effective competition, including:

- The majority of inhabitants were considered to live in an area with effective competition In Portugal, 56% of homes were defined in such areas, and they had among other things included cities where one competitor of MEO had had more than 50% distribution within the city in question and the retail arm of MEO had had a share of less than 50% in the same city. If one were to apply such conditions to Iceland, and apply municipalities rather than cities, one could assume that about 71-90% of homes were connected to fibre-optic or would be connected to GR or Tengir fibre-optic at the end of 2021. In the same areas, Siminn had about 30% share in the retail market for fibre-optic.
- Míla fibre-optic distribution was low in areas that were not considered to be competitive areas.
- Retail prices were generally comparable across the whole country.
- Wholesale prices were higher in rural areas.
- Those areas where fibre-optic systems had not been deployed were more sparsely populated than those areas where such systems had been deployed. For this reason, they were more likely to have higher average costs for each installed line.

AM stated that ANACOM had defined the retail market as broadband service supplied over copper, fibre-optic, and cable system, and had isolated market share in fibre-optic when the time had come to elaborate obligations. ANACOM had distinguished between competitive areas and areas where there was no competition, on the basis of municipalities (parishes) which totalled 3000.

On Market 3a, the Administration had come to the conclusion that MEO had SMP across the whole of Portugal, but on Market 3b this was only in competitive areas. On Market 3a, ANACOM had proposed to maintain obligations on MEO for access to ducts, conduits and masks, and access to grey fibre where there was no space. On Market 3b, the Administration had proposed to maintain obligations on MEO for access to bitstream over copper. ANACOM had on the other hand, refrained from imposing access obligations (or other obligations) on MEO fibre-optic on both markets in its draft.

These ANACOM plans, with the exception of MEO fibre-optic on the markets in question, would have led to "Phase II" investigation by the EU Commission. The Commission had subsequently issued a recommendation (Commission Recommendation of 29 November 2016) where it was demanded that ANACOM amended or withdrew the above specified plans to exempt fibre-optic obligations on areas where competition had not been effective on retail markets pursuant to the ANACOM analysis, and when looking to the future, that there was limited likelihood that distribution of next generation networks on commercial grounds would take place and where no other wholesale access for next generation networks were in place, that could create an environment for sustainable competition. In the opinion of the Commission, ANACOM should impose access obligations on the MEO fibre-optic network in such areas on both markets. On the other hand, the Commission had not demanded that such access be offered in competitive areas.

It was then stated in the AM report that ANACOM had rejected the above specified demands from the Commission on 22 December 2016, with arguments. The arguments had among other things included that an NRA was not automatically obliged to impose an obligation for access to fibre-optic on a party that had been designated as having SMP on the relevant markets. Circumstances in each individual country needed to be deliberated and proportionality had to be respected. To impose obligations on MEO fibre-optic in areas where the company hardly operated, was not likely to increase competition. An obligation for access

to ducts, conduits and masts had proved useful and had supported distribution of fibre-optic networks, both of MEO and of its competitors, that thus were on a level footing in such deployment. One could consider state aid in the most remote areas. Furthermore, the MEO position of market dominance on the relevant markets was first and foremost a consequence of MEO high market share in retail of copper connections (ADSL), and not fibre-optic. Then, no competition problem had been identified on the retail market, that could call for such an access obligation on fibre-optic on the relevant wholesale markets, in addition to the obligation for access to ducts, conduits and masts.

It had then been the ANACOM conclusion that it had not only been unnecessary to impose an access obligation on MEO fibre-optic in competitive areas, but also in areas where there was no competition. Circumstances in Portugal and Iceland were in many ways comparable. Then there is the fact that ANACOM considered that there was substitutability between copper and fibre-optic, but unlike the PTA plans, ANACOM took into account the low MEO market share in fibre-optic when elaborating obligations.

With reference to the above, Míla said that one should not consider that it should be thought necessary to apply obligations on fibre-optic in competitive areas, nor was it in reality necessary in other areas, given the situation that pertained in Iceland. It was for example amazing that such obligations should be imposed on Míla in areas where GR had a much higher market share.

The position of the PTA

The PTA reiterates that it is the conclusion of the Administration that in this country there is no reason to segment geographic markets on the relevant wholesale markets and thus there are no separate geographic markets. Reference is made to detailed discussion on this issue in Sections 5-7 here above, and in the same sections in the revised market analysis (Appendix A).

Míla refers to ANACOM in Portugal, having in its analysis from 2016, not imposed obligations on fibre-optic of an SMP operator in that country (MEO) and to the fact that access to fibre-optic there was entirely on commercial grounds. The PTA has earlier in this document, and again in the revised market analysis (Appendix A), explained why the Portuguese case is not an appropriate precedent for Icelandic circumstances today. Reference is made to this.

The PTA reiterates however that MEO had hardly commenced fibre-optic deployment in that country in 2016 (only 3%), and that ANACOM had generally placed strong emphasis on improving competition with a successful and detailed obligation on access to ducts and conduits and the EU Commission raised serious objections to the lack of obligations in question. In this country, access to ducts and conduits has not been common and Míla has deployed an extensive fibre-optic network very rapidly since 2016, and there are plans for continued rapid development.

Míla appears to suggest that the obligations that the PTA plans to impose on the company are not conducive to achieving their objectives and could therefore not be considered necessary nor to the benefit of electronic communications companies and end users and refers again to

the above specified case from Portugal. The PTA must assess competitive conditions in this country in its market analysis and has done that in this market analysis. The PTA considers the obligations that the Administration plans to impose on Míla, to be precisely likely to achieve their objectives, which are to increase competition on the relevant wholesale markets and downstream retail market, for the benefit of consumers. The obligations are therefore necessary for this purpose. The PTA has here above explained why the referenced Portuguese case cannot be precedent for Icelandic circumstances today. The PTA also reminds that the Portuguese case is not typical in Europe for market analyses or the elaboration of obligations on the relevant wholesale Markets 3a and 3b.

Analysys Mason (AM) also states that circumstances in this country are in many ways, comparable to the circumstances described in the Portuguese case from 2016. The PTA disagrees with this, as explained above. AM states among other things that the majority of inhabitants of Portugal were considered to live in areas with active competition. The PTA reminds that ANACOM came to the conclusion that there was no necessity to segment geographic markets on the relevant Market 3a, but only on Market 3b. The PTA comes the conclusion that there is no reason for such geographic segmentation in this country, neither on Market 3a nor 3b, as circumstances are very similar on these markets in this country. There is only reason to prescribe varying obligations on the relevant markets in this country.

One can note that in Portugal, Market 3b consists of copper, fibre-optic, and cable systems, and there is therefore competition between more infrastructures than in this country, as cable systems do not exist here to any significant degree. By the end of 2020, the position of Míla was furthermore stronger in this country on Market 3a (57% market share) than the position of MEO in Portugal (50%) in 2016. If that precedent applied, it should be an even more remote possibility to segment geographic markets in this country than in Portugal on Market 3a.

AM refers to the fact that the EU Commission raised serious objections to the above specified lack of obligations with respect to the MEO fibre-optic network, and that ANACOM had not complied with them. The PTA reminds that the EU Commission does not have a veto with respect to elaboration of obligations. It must therefore be considered likely that the Commission would have exercised such authority had it been in place, given the hard tone one can discern in its decision. The fact that ANACOM had rejected the decision of the Commission cannot be a precedent for the PTA. One main ANACOM argument for the lack of obligations on the MEO fibre-optic was that the company's position of market dominance was first and foremost a result of MEO high market share on the retail market for copper local loops and not for fibre-optic connections. The PTA reminds that in mid-2020, Siminn had become the largest retailer in the country in sale of broadband connections over fibre-optic, where the company had had a very small share 3-4 years previously. These ANACOM arguments in no way hold in the circumstances in this country today.

The PTA finally reminds that in the additional consultation which the Administration opened on 30 October 2020, the PTA proposed to retract the intention to impose an obligation on Míla fibre-optic for cost-oriented tariff, and instead to prescribe an ERT obligation on the

Siminn Group. In this way, the PTA had made concessions to the serious concerns of Míla and AM.

Míla also refers to an Ofcom case from January 2020, which is referred to in the AM report (Consultation: Promoting investment and competition in fibre networks – Wholesale fixed telecoms market review 2021-2026). There a company had been designated as having SMP, but it was not considered necessary to impose obligations on more than a small part of the market, and Ofcom had concluded that this approach was adequate to achieve the objectives of supporting investment in fibre-optic systems in competition, etc.

In the AM report it was stated that Ofcom provided market analysis on Market 3a which contained all types of technology in fixed networks (except leased lines) and all speeds, both for home and corporate use. In other words, all broadband services over copper, cable systems and fibre-optic in wholesale belong to the same market. Distribution of fibre-optic networks and the uptake of service on such networks was very low in the United Kingdom.

Ofcom planned to segment the geographic market into two parts, i.e., 1) areas where some deployment of high-speed networks had already taken place by competitors of Openreach or where such deployment could be financially feasible in the future and 2) areas where such development was unlikely.

Ofcom had planned to designate Openreach as a party with SMP on both of the above specified geographic markets and to impose price control obligations. On the other hand, there was no intention to impose price control on FTTH service in either of the geographic markets, except on 40/10 Mb/s service in limited areas where 40/10 Mb/s service on copper (VDSL) copper was not on offer but where FTTH service was.

In the former area the intention was to only apply price control on FTTC 40/10 Mb/s service and with respect to copper local loops. On the other hand, not on FTTC service with more speed than that, nor on FTTP or G. Fast service on copper, regardless of speed. Ofcom considered that this approach would be effective to achieve the objective of supporting rollout of fibre-optic networks with increased competition in infrastructure, while at the same time, consumers would be protected from excessively high prices or from competition at retail level being sacrificed for the short term.

With reference to the above one should not consider that it should be thought necessary to apply obligations on fibre-optic in competitive areas, nor was it in reality necessary in other areas, given the situation that pertained in Iceland. It was for example amazing that such obligations should be imposed on Míla in areas where GR had a much higher market share.

The position of the PTA

The PTA points out that the above specified case from the United Kingdom is a consultation document and not a final decision. At this stage, it is therefore not at all clear whether these plans will come to fruition. In addition to this one can point out that the United Kingdom is no longer a part of the EEA. Míla properly points out that the situation with regards to fibre-optic distribution between the countries varies greatly, as fibre-optic rollout in the United

Kingdom is at a very early stage while it is very advanced in this country. The above UK plans give clear indications of this. This UK case can therefore not be a precedent for the PTA in this country.

It is however remarkable that Ofcom should consider there will be substitutability between copper and fibre-optic networks during this planned period, i.e., 2021-2026. This does not harmonise with the Míla arguments in the market analysis here under discussion. The precedents that Míla repeatedly presents in its comments have however in common, that the company only chooses what suits it from the analysis in question and that these are analyses that are often exceptions to the rule, such as from Portugal, Sweden, and United Kingdom. The last two analyses have in addition to this, not having appeared in the form of final decisions.

Míla said that when making a decision on imposition of obligations on one or more companies operating on the market, one also had to keep in mind that these were burdensome measures for the companies in question that operated in competition with other companies that were not subject to the same obligations. Such obligations could constitute a significant financial burden above and beyond competitors.

In the light of the fact that these could be significantly burdensome obligations, the NRA had to proceed with caution to ensure that they were based on adequate investigation that individual obligations were necessary, that there were adequate arguments to support how the obligations in question were intended to resolve specific existing competition problems and that proportionality considerations were respected, see European Court judgement in case no. 265/87. More specifically, that obligations were lawful, appropriate, and necessary to achieve the objectives that were legally targeted with the imposition of the obligations. In the opinion Míla, these reservations were far from fulfilled.

In the AM report, it was stated that the above specified judgement of the European court in case 265/87 was important in this context, but this was a case that related to the market for breakfast cereal. There it was stated that the rule of proportionality was a fundamental principle of European law. It was furthermore stated that the imposition of fines was lawful if they were appropriate and necessary to achieve the objectives of the legislation in question. When it was possible to choose between a number of appropriate penalties, one had to apply those that were least extreme and they should harmonise with proportionality, given the objective that was aimed for.

It was stated in the report in question that it appeared that the PTA had not given full consideration to 1) that there were other measures than price control on FTTH and 2) that the Settlement in force between the CA and the Siminn Group, which prescribed that service that Míla provided to Siminn should be provided for non-related parties on a basis of equality (EoI).

With respect to access obligations, one could point out that Míla was obliged to observe such non-discrimination without regard to whether the PTA imposed obligations on Míla.

AM furthermore pointed out that pursuant to paragraph 1502 in the preliminary draft, where there was discussion on denial of access on Market 3b, it was stated that in order for denial

of access to create significant competition problems, there needed in general to be in place those circumstances where competitors on downstream markets did not have the option of using another network that could provide comparable access at comparable terms. In paragraph 997, where there was discussion on market share on the relevant market, the PTA had stated that the fibre-optic networks of GR and Tengir reached about 70-90% of homes in the country. The PTA had further stated that the retail price of those parties that used those networks were comparable or slightly lower than the Siminn retail prices on Míla networks. AM states that a large majority of broadband connections provided by parties other than Siminn, in GR and Tengir territory, were FTTH connections. This meant comparative access at comparative terms, which meant that access obligations on FTTH were not necessary in such areas.

It was then stated in paragraph 1165 in the preliminary assessment, where there was discussion on pricing on Market 3a, that Míla had incentive and opportunity to exercise price discrimination. In the opinion of AM, the PTA did not take the Settlement between the CA and the Siminn Group into account.

It was stated in paragraphs 1282 and 1592 in the preliminary draft, that the PTA needed to apply a price obligation on Míla fibre-optic. In the opinion of AM, this was not correct as it was possible to apply a simple Economic Replicability Test (ERT) instead.

The position of the PTA

The PTA agrees with Míla that obligations are burdensome measures that can constitute a significant financial burden for the company. Furthermore, that investigation and arguments need to be adequate, that proportionality is respected and that obligations are intended to resolve specific competition problems to be lawful, appropriate, and necessary to achieve the objectives that are aimed at.

It is the nature of obligations that they are imposed on a company with SMP, that they are burdensome and that they can constitute some financial burden for such companies. Anything else would be out of the question. Here above, the PTA has supported the Administration's position with detailed arguments, that the case was thoroughly investigated in an adequate manner and refers to this. In the opinion of the PTA, the Administration's conclusions were furthermore detailed and well supported by detailed arguments in this analysis.

In the opinion of the PTA, the obligations that the PTA intends to impose on Míla will support the solution of more specifically defined competition problems, that are described in detail in Sections 10.2 and 11.2 in the revised analysis (Appendix A). The PTA considers the obligations to be lawful, appropriate, and necessary to achieve the objectives aimed at, with their imposition, as is explained in Sections 10.4 and 11.4 (assessment of impact and necessity of imposed obligations) in the revised analysis. Reference is made to those sections about these issues.

In respect of proportionality, one could say the same, and the PTA considers that it has respected proportionality with the imposition of the obligations, particularly after having opened additional consultation on retracting the imposition of obligations on Míla for cost orientated tariff for Míla fibre-optic and having instead prescribed an ERT obligation on the

Siminn Group. AM actually points out that the cost-oriented obligation on fibre-optic was not necessary, as the Administration could impose an ERT obligation instead. The PTA considers it perfectly clear that some kind of restraint is necessary on pricing within the Siminn Group, with respect to the company's fibre-optic network. The PTA reminds that in the last analysis, which was completed with a decision in the year 2014, Míla fibre-optic rollout had hardly commenced, but now it is so advanced that in mid-2020, Siminn had become the largest provider of connections over fibre-optic network, after having had a very low proportion of such connections in the last analysis. The PTA therefore considers it clear that the ERT obligation in question is in accordance with proportionality and does not conflict with the above specified EU judgement in case no. 265/87, which discusses a market for breakfast cereal.

The PTA also completely rejects that the Administration has not taken into account the fact that there are other measures than a cost analysis obligation on Míla fibre-optic. The ERT obligation in question is precisely such a measure. These obligations will be discussed here later in this document, and in the revised analysis (Appendix A) and in Appendix C. Reference is made to this.

The PTA further rejects that it had not taken into account that there is a Settlement in force between the Siminn Group and the CA, where an EoI non-discrimination obligation was prescribed. The PTA reiterates that despite the fact that the Settlement in question had been in force since 2013, the PTA had identified, in this market analysis, extensive real and potential competition problems on the relevant wholesale markets, that both result from the structure of the market and from the behaviour of the Siminn Group. The provisions of the Settlement have not led to effective competition on the wholesale markets in question or on the downstream retail market. The Siminn market share for example, has hardly declined at all since the last analysis in 2014 and it stood at over 46% by the end of 2020. The Mila market share is still very high on the relevant wholesale markets, the that is to say 57% on Market 3a and 57% on Market 3b at end of year 2020. Competitors of the Siminn Group have also repeatedly accused the Group of breaching the Settlement from 2015 and, with the CA Decision no. 25/2020, that institution came to the conclusion that Siminn had breached specific provisions of the Settlement, and the CA is examining more potential infringements of Settlements between the Siminn Group and the CA.

AM refers to paragraph 1502, which can be found in Section 11.2.3.1 in the preliminary draft and carries the title "denial of access" and is part of the discussion on competition problems on Market 3b. Similar discussion can be found in paragraph 1162, which discusses competition problems on Market 3a. According to that paragraph it is stated that for denial of access to create significant competition problems, circumstances must generally exist where competitors on downstream markets did not have the option of using other networks that could provide them with comparable access at comparable terms.

The above specified paragraph 1502 in the preliminary draft is as follows:

"For denial of access to create **significant** competition problems, circumstances must **generally** exist where competitors on downstream markets do not have the option of using other networks that could provide them with comparable access at comparable terms.

Despite the fact that in this country, fibre-optic networks have been deployed by parties other than Mila, they do not have national coverage and at many locations retailers need to rely on Mila wholesale service. One also has to keep in mind that there are still just over 34% of Internet connections in this country that are on the copper network, which are only available from Mila. Mila has also taken over operations or purchased many of the local fibre-optic networks that have been deployed in the countryside with grants from the Telecommunications Fund. Mila refusal of access to connections on Market 3b could thus have serious consequences for competition on downstream markets, particularly if the operational basis of competitors on the market in question is not secure as a result of market structure and/or of behaviour of the Siminn Group."

The PTA will revise this paragraph, and it will be as follows in the revised market analysis (Appendix A):

"For denial of access to create **significant** competition problems, circumstances must **generally** exist where competitors on downstream markets do not have the option of using other networks that could provide them with comparable access at comparable terms. Despite the fact that in this country, fibre-optic networks have been deployed by parties other than Mila, they do not have national coverage and at many locations retailers need to rely on Mila wholesale service. One also has to keep in mind that there are still just over 34% of Internet connections in this country of **next generation access** on the copper network, which are only available from Mila. **This is not counting the 5000 connections on ADSL that are still active, and including them, the proportion is 36%.** Mila has also taken over operations or purchased many of the local fibre-optic networks that have been deployed in the countryside with grants from the Telecommunications Fund. Mila refusal of access to connections on Market 3b could thus have serious consequences for competition on downstream markets, particularly if the operational basis of competitors on the market in question is not secure as a result of market structure and/or of behaviour of the Siminn Group."

The PTA notes that the above specified discussion only describes one of many possible competition problems that could arise, and they are explained in Sections 10.2 and 11.2, and in reality, one of the more serious. There it is stated among other things that for denial of access to create a "significant" competition problem, the circumstances described need to be "generally" in place. This is therefore not a mandatory condition. The PTA furthermore describes later in the paragraph that the Míla competitors do not control an electronic communications network with national coverage, as is the case with Míla, and that the company had been purchasing or ensuring long-time control over local countryside networks that were deployed with state aid. Míla has also been rolling-out such networks against state aid subsidies. The PTA cannot see that this comment could lead to an obligation for access not being imposed on Míla on the relevant wholesale markets, but it is clear that an access obligation on a company that has been designated as having SMP is necessary. Other obligations would not work if an access obligation was not in place.

AM refers furthermore to paragraph 997, which can be found in Section 9.2 in the preliminary draft and carries the title "Market share on Market 3b". There the PTA had stated that the fibre-optic networks of GR and Tengir reached about 70-90% of homes in the country. AM said furthermore that a large majority of broadband connections provided by parties other

than Siminn in the GAA and Tengir territories, were fibre-optic connections, which meant an access obligation to Míla fibre-optic connections was not necessary in such areas.

The PTA has previously answered that the Administration would revise information on the distribution proportion of GR, Tengir, Snerpa and Austurljós and distribution projections until end of year 2023 in the revised draft market analysis (Appendix A). The PTA stated in paragraph 977, that the GR distribution percentage was about 70% in mid-2019. The distribution proportion of GR was about 67% at end of year 2020 and that of Tengir, about 6%. At the end of 2023, it expected that the joint distribution proportion of the two companies will be around 77%.

Siminn said that the position of the PTA was affected by the fact that the Administration had delayed in an unlawful manner, the conducting of market analysis and as a result of this had to justify the delay by maintaining obligations instead of recognising that it should have lifted obligations, at least in the operational territory of GR as a whole and in part in the Tengir operational territory, about 2-3 years ago. The situation was that this unlawful delay may have made the PTA liable for damages, as it was clear that there was a duty to lift obligations that were not reasonable, rather than maintain them. For this reason, the PTA was in a rather difficult position that the Administration appeared to tackle with unfounded assertions.

Another PTA problem was reflected in the Administration having asserted that in Decision no. 10/2018 and in very substantial press releases that Siminn TV service had had a negative impact on competition between Siminn and Vodafone and between GR and Míla. The fact was on the other hand that the GR position had strengthened during the period covered by the PTA Decision no. 10/2018, contrary to assertions from the PTA, which showed and proved assessment of impact resulting from Siminn TV service was materially incorrect. In addition to this, it was established that the PTA assessment of material input of paragraph 5 of article 45 of the Media Act had been incorrect, as the PTA decision relating to the Vodafone part had been rendered void and the PTA assertion that Siminn would move the breach to the GR system if an agreement were reached with GR, were also wrong. Given the conclusion of the judgement, it would be normal that the decision was declared void and referred back to the PTA for processing.

This position taken by the PTA in Decision no. 10/2018, which discussed PTA market analysis, meant that when the same individuals or institutions were analysing the market and researched the issue in question, it was impossible for them to come to the conclusion that their own position in Decision no. 10/2018 had been wrong. This was why it was almost inevitable that a neutral party who had not worked on or taken part in Decision no. 10/2018, became involved in the PTA market analysis in order for it to be possible to trust that this was an unbiased assessment, independent of the prior PTA Decision no. 10/2018.

When the Siminn Group was registered on the stock exchange in 2015, the registering parties had warned investors in the registration description of the Group that the PTA had announced its objective to reduce the market share of the Siminn Group where the Administration could do this. The alleged market analysis here under discussion clearly showed that objective of the Administration, for which there was however no basis in law.

All of the above clearly leads to it being out of the question for Siminn to have an unbiased assessment of the situation on the market. If the PTA had investigated the case and had followed the data instead of guessing, then it was perfectly clear that the conclusion would have been otherwise. The question therefore arose whether the PTA was no longer competent to discuss market analysis that related to Siminn or Míla, as there was little likelihood that the PTA would recognise that the assessment of the Administration with respect to impact on the market had been wrong, and thus making it liable for damages. Lack of investigation and the time that has passed since the analysis was made, could lead to this appearing to have considerable significance in the case. There were thus doubts about whether the PTA case procedure was in accordance with item 6 of paragraph 1 of article 3 of the Administrative Procedures Act. It was clearly stated that the PTA almost maintained that even if courts were to void the PTA Decision no. 10/2018, the PTA would still maintain that the assessment of the Administration was correct. In other words, that the PTA would not retract its position even though courts ruled the PTA decision to be no longer valid, which they had now done in part.

The position of the PTA

The PTA recognises that there has been a delay on the market analysis that here is under discussion. This is a very extensive and complex analysis, and the PTA does not have at its disposal as large a group of employees as sister institutions have in Europe, and in addition to this, many other large and complex projects have delayed the work. The processing of comments that came in the two consultations have furthermore taken more time than the Administration allowed for, as they are extremely wide reaching and much more wide reaching than the Administration has previously faced. It is not unusual that market analyses of sister institutions of the PTA in Europe, that are mostly considerably larger and with larger staff than the PTA, have been delayed, and even for a similar length of time.

The PTA has made internal provisions to prevent such delays repeating themselves, and the Administration expects that a new market analysis will replace the one here under discussion within 3 years, among other things because of circumstances that have been previously explained in this document.

The PTA totally rejects that dubious considerations lay behind the delay in question, or that it had in any manner impacted on the conclusion of this market analysis that is now available. The PTA considers it clear that as the Siminn Group is in as strong a position as currently, that they would have been even less reason to come to the conclusion 2-3 years ago that Míla no longer had SMP on the relevant wholesale markets. That is perfectly clear, as there were rather minor changes to the first part of the market analysis currently in force. For this reason, the PTA rejects the Siminn assertion that the Administration has in an unlawful manner maintained obligations on Míla. The PTA reiterates that although it would have been more fortunate had the market analysis procedure taken a shorter time than was the case and the PTA plans to take measures that such will not repeat itself.

Siminn refers to the PTA Decision no. 10/2018, where the Administration came to the conclusion in a very complex and time-consuming case, that the company had breached the provisions of paragraph 5 of article 45 of the Media Act by directing customers of the Siminn

media content provider to unrelated electronic communications company, i.e., the electronic communications part of Siminn (IPTV system) and to a subsidiary of Míla. Siminn maintains that the PTA did not tell the truth by maintaining in this decision that the Siminn behaviour in question had had a negative impact on competition between Siminn and Vodafone on the one hand and between Míla and GR on the other. The truth of the matter in the opinion of Siminn was that the GR position had strengthened over the period covered by the decision (2015-2018). For this reason, the whole assessment of the impact of Siminn TV service was materially incorrect.

The PTA rejects the above specified Siminn assertions with respect to PTA Decision no. 10/2018. With a judgement of the District Court of Reykjavík from 1 July 2020, it was confirmed that Siminn had breached the provision in question in the Media Act. The grounds of the PTA decision with respect to the impact on GR were confirmed. In the judgement, it says about this issue:

"There is no doubt that the previously described decision by the plaintiff [...] on 1 October 2015 had the effect that those who used the fibre-optic network of the defendant GR as an underlying electronic communications network for subscription TV, became unable to access material from the content provider of the plaintiff in a non-linear manner without this transfer of electronic communications taking place through an electronic communications network of the defendant Mila. The decision of the plaintiff was therefore, all things being equal, conducive to increasing transit through the electronic communications system of the subsidiary. ...

From the case exhibits one can conclude that the defendant GR repeatedly requested from the plaintiff that it be allowed to carry its IPTV service over its own fibre-optic network in a comparable manner to that of Míla. The plaintiff on the other hand, rejected this request from the defendant with reference to the fact that it was not ready to provide the plaintiff with passive access to the company's dark fibre.

It shall be accepted that the plaintiff's claim to the effect that passive access to the fibre-optic network of the defendant GR was the same in reality as if he made a demand to take over part of the operations of the company's fibre-optic network. It is here taken into account that comparable operations of the fibre-optic network of the plaintiff's subsidiary, Mila, is in the hands of the latter company and nowhere in case exhibits can one see that the plaintiff considered it normal to have such passive access to the fibre-optic network of that company. On the contrary, the events of the case indicate that the plaintiff had expected that his subsidiary in question would activate the access in question and control electronic communications transit on his behalf over the network of its competitor, the defendant GR. In the opinion of the court, the claim of the plaintiff regarding passive access was therefore incompatible with his duty as a media content provider to not direct custom to a related electronic communications company, i.e., Mila, and with the furthermore clear objectives of Act no. 38/2011 to the effect that customer access to TV material should be independent of the underlying electronic communications networks."

It was therefore, the conclusion of the court that the above specified Siminn breach against paragraph 5 of article 45 of the Media Act was "unequivocal" and that it was still taking place when the above specified PTA Decision no. 10/2018 was made, as Siminn had not yet then made an agreement on fair and normal access to the GR electronic communications network,

such that the company could disseminate material from the Siminn content provider in a comparable manner and at comparable terms as enjoyed by Míla.

On the other hand, the court did not accept that Siminn had breached against Vodafone, as the PTA had deemed in the challenged decision, by not making an agreement with Vodafone that that company could disseminate the Siminn visual content on its own IPTV system, as was the case until October 2015, or ensure in another manner that customers of the Siminn content provider could purchase access to the visual content in question in another manner than by purchasing electronic communications service from Siminn, e.g. with an sufficient OTT solution. The court came to the decision that the objective of the above specified provision was not to initiate an indirect obligation on one media provider to authorise another media provider to have non-linear distribution and sale of material to which the former media provider had secured rights. The court also considered that the IPTV system in question was not an independent electronic communications network, but a system that needed the support of some such underlying electronic communications network. Then it states, in the judgement:

"Though one may concur that the operation of an IPTV system for the purpose of distributing visual content is strictly speaking deemed to be electronic communications service, it is nevertheless clear that the operation of such a system is an inseparable part of the operations of the content provider that the customer receives access to by purchasing a subscription and connecting to the system. The system in question serves in reality only the purpose of enabling customer access to the content provider. One must furthermore take into account that the electronic communications service provided for the customer with the IPTV system is insignificant when compared with the media service that subscription to or purchase of access to a content provider has as its main objective."

The court reduced the fine that the PTA had imposed on Siminn from ISK 9,000,000 to ISK 7,000,000. The PTA was not satisfied with this interpretation of the court of the concepts "electronic communications network" and "electronic communications service", nor that the PTA conclusion had implied an obligation for Siminn to make an agreement with Vodafone and appealed the case to the National Court. Siminn and Vodafone did so also. One can expect a conclusion from The National Court in the spring of 2021.

The PTA considers it clear that the Siminn behaviour in question, which lasted from October 2015 until August 2018, when Siminn began to offer the non-linear visual content in question over an OTT solution, had a negative impact on operations of GR in competition with Míla and on the operations of Vodafone and other service providers competing with Siminn. Siminn had for example succeeded in retaining its high market share in recent years, which must be considered a good result, not least in the light of the increased fibre-optic rollout by GR, on which Siminn has not yet offered its service. At the same time, Vodafone had lost significant market share. Even though the active GR connections had increased during the period in question, it is the assessment of the PTA that this resulted from the extensive and expensive, GR investments in fibre-optic rollout over a period of many years. The PTA has among other things, documentation in its possession that shows [...].

The PTA completely rejects the Siminn assertion that the Administration is not a neutral party for conducting the market analysis in question, because of its involvement in the TV case in

question and that the Administration is thus not a competent authority. The PTA is a competent authority to interpret both the provisions in question of the Media Act and to conduct the market analysis in question. Apart from that, the PTA points out that the District Court confirmed the Siminn breach in main respects, but altered the parameters in part, as described above.

The PTA is not aware of having at any time used the wording that it was the objective of the Administration to lower the Siminn Group market share. On the other hand, the electronic communications regulatory framework is designed to increase competition, and this must lead to the prior incumbent monopolist in electronic communications not being able to maintain a very high market share until the end of time. Otherwise, the electronic communications regulatory framework would not be working as it should, and the intervention of the PTA in electronic communications markets would not be returning results on the basis of the declared objectives of the electronic communications regulatory framework. It is clear that competitors to the Siminn Group will not flourish with no or very little market share.

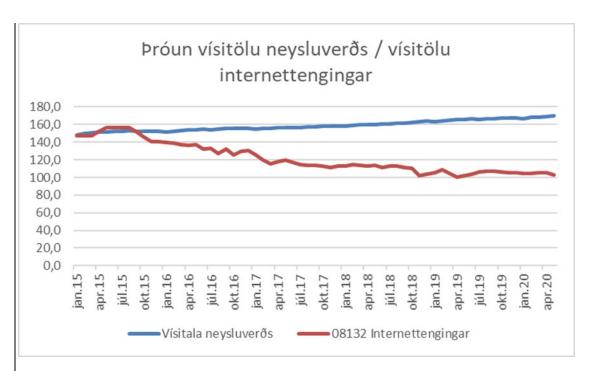
The PTA rejects once again that it has not fulfilled its investigatory duty when conducting the market analysis in question, or that the conclusions are based on guesswork. Reference is made to prior PTA answers in this document in this connection.

Finally, the PTA notes that the Siminn behaviour in question, which is described in the above referenced TV case, is only one of the very many real and potential competition problems that the PTA has defined in this market analysis. Reference is made to Sections 10.2 and 11.2 in the revised market analysis (Appendix A) in this connection, and to the same sections in this document here above.

Siminn says that a key prerequisite and mandatory condition for authority to impose obligations, was that there was not effective competition on the relevant market. It was therefore clear that it was necessary to define what "effective competition" was, and the concept was nowhere defined in a formal manner. In a publication by Richard Whish, "effective competition" was explained in such a manner that a company was faced with a "reasonable degree" of competitive pressure. For this reason, one had to take into account whether a company on the market was subject to competitive pressure. It was furthermore important to analyse a market in a local manner, as competition can vary by area, thus making it essential to apply the appropriate rules for varying conditions. As an example, Siminn pointed out that obligations that were based on average calculations, as the PTA did, resulted in obligations that did not meet the needs of anyone in an area.

Simin pointed out that development in Internet service in recent years was such that it was hardly possible to maintain that effective competition did not pertain. Prices had dropped and quality increased. It was not possible to dispute these facts and Simin here indicated price development:

(Source: Statistics Iceland



According to measurements by Statistics Iceland, the consumer price index increased by 14.5% from the beginning of 2015, while the index for Internet service dropped by about 30%. One could hardly say that this was an indication of shortage of competition in retail.

Next, one could consider quality of the service, and the best measure of this was speed of connections. Other information on quality of connections was not available. In 2015, fibre-optic connections were 27.5% of connections and this had now risen to 62.8% in 2019. With respect to distribution of fibre-optic connections, it was perfectly clear that today over 80% of homes had access to fibre-optic local loops.

Siming also indicated a news item from the PTA dated 6 July 2020, where it was stated:

"The Administration will continue to protect healthy competition on the electronic communications markets, and the price of electronic communications service in Iceland is among the lowest known." (Siminn font change)

It was clear that there, the PTA discussion in the market analysis does not match the actual reality. The PTA recognised that the price of electronic communications service in Iceland was among the lowest known. This meant that Siminn, naturally had difficulty in understanding the assertions by the PTA that there was no effective competition on the electronic communications markets. The PTA was thus contradicting itself.

Something else that actually appeared in the PTA market analysis was that distribution of fibre-optic was also among the best reported, and that should be an indication of effective competition.

The situation is such that in Iceland, consumers received the best-known quality at the lowest known price. How it could be that competition was not effective was simply a mystery to Siminn, as it was clear that the PTA asserted this against its better judgement.

In this way, it was proven that the PTA market analysis did not reflect reality. Simply for this reason, the PTA should retract its analysis and start again from scratch. An investigation of

competition on the market needed to be conducted, which had not been done. Siminn also referred to the Statistics Iceland Internet connection index, which had showed that the price for Internet service had decreased steadily since 2015. The PTA also needed to check prices in the Nordic countries, which gave strong indications that pricing on the market was significantly lower in this country.

The above specified pricing of service would not be achieved with ineffective competition. The PTA had thus proven that there was effective competition on markets for electronic communications service in this country, though the Administration now wished to assert something else for the purpose of continuing its projects, to micromanage the market with its bias and to impose increased obligations on the Siminn Group. Then one could point to the entry of Nova in the Capital City Area, as in a few years the company has achieved 20% market share, which has returned ISK 2.5 billion in business. This fact was not an indication of major access barriers, quite the contrary. The company could also easily increase the number of connections by offering Internet service across the whole country but chose for some reason not to do so. Siminn also pointed out that Nova was the company that had gained most customers in 2019. This means it was not possible to maintain that access barriers were high.

When analysing whether competition was efficient, it was normal to take into account parameters resulting from competition, such as lower price, increased quality of service and innovation. The PTA had not considered any of these factors. The PTA analysis was thus contrary to article 10 of the Administrative Procedures Act. The PTA, for this reason, could not use this as grounds and the PTA was challenged to review its position and to retract its document, taking into account the fact that the price and quality of electronic communications services were among the best known.

The position of the PTA

The PTA has performed a detailed geographic analysis of the relevant wholesale markets and has come to the conclusion that competitive conditions between areas did not differ sufficiently to justify geographic segmenting by area. With respect to this issue, reference is made to Sections 5-7 in the revised analysis (Appendix A) and to the same sections here above. On the other hand, the PTA considered there to be reason to apply varying obligations by area. The PTA totally rejects having been remiss in the conducting of this analysis, as it is a very wide reaching and detailed geographical analysis. For this reason, the PTA also rejects that obligations did not meet the needs of any area, as Míla has an electronic communications network (copper and/or fibre-optic) with almost national coverage, the only company in the country.

The PTA agrees with Siminn that the conditions for imposing obligations on electronic communications companies are that effective competition does not pertain in the relevant market. This both applies to the relevant wholesale market and downstream retail market. Siminn says that it is important to define what effective competition is, and that the academic, Richard Whish, says that it is a "reasonable degree" of competitive pressure.

The concept "effective competition" appears widely in competition legislation, without the concept being specifically defined, and nor does it occur in the explanatory notes to the bill

that became this legislation. The PTA considers it most appropriate to define the concept in a negative manner, with the material provisions of competition legislation in mind, such that competition is not effective if any company is in a dominant position on the relevant market or has SMP in the understanding of electronic communications legislation. In this way, the PTA is certainly not saying that the academic in question is wrong, as the greater the competitive pressure, the more likely there is to be effective competition in place.

In Sections 8 and 9 in the preliminary draft, see now the same sections in the revised analysis (Appendix A), one can see a detailed analysis of competitive conditions on the relevant wholesale markets on the basis of a very many parameters, that among other things, can be found in ESA guidelines on market analysis. On the basis of the overall assessment, which among other things, shows the level of competitive pressure in this country on the relevant markets, the PTA came to the conclusion that there was not effective competition on those markets in this country and that it was therefore mandatory to designate Míla as having SMP on those markets. In Section 3, one can see detailed analysis of downstream retail market, and a requirement for being able to designate a company as having SMP on the relevant wholesale markets is that effective competition does not pertain there. The PTA conclusion was that effective competition did not pertain on the relevant markets.

Siminn pointed out that development in Internet service in recent years was such that it was hardly possible to maintain that effective competition did not pertain. Prices had dropped. According to measurements by Statistics Iceland the consumer price index had increased by 14.5% from beginning of 2015 until April 2020, while at the same time, the index for Internet service had dropped by about 30%. The PTA had stated in a news item, dated 6 July 2020 that the prices for electronic communications service in Iceland were among the lowest known. This was not compatible with the PTA discussion in this market analysis. The PTA also needed to check prices in Nordic countries, as such a comparison would give strong indications that pricing on the market was significantly lower in this country. The prices in question would not be achieved with ineffective competition, and the PTA had thus proven that there was effective competition on the markets for electronic communications services in this country. When analysing whether competition was efficient, it was normal to take into account parameters resulting from competition, for example, lower prices. The PTA had not taken this factor into account.

The fact that the pricing of Internet service, when one did not take the line charge into account, had dropped during recent years in this country was not on its own an indication that effective competition pertained on the relevant wholesale markets or downstream retail market. This is in accordance with international development and Iceland is not an exception in this respect. It is certainly true that the PTA mentioned in the above referenced news item, that the price for Internet service was among the lowest known.

With regards to price comparison between the Nordic countries, one can particularly mention that in 2016 Iceland was in second place among the 5 Nordic countries, followed by Denmark, which was one place above in the European list of ITU, while the remaining countries were placed somewhat below. See more detailed comparison on the table here below.

2019	sæti	2018	sæti	2017	sæti	2016	sæti
Finland	23	Iceland	15	Iceland	16	Denmark	21
Denmark	24	Norway	22	Denmark	18	Iceland	22
Norway	25	Finland	24	Finland	19	Finland	24
Sweden	31	Denmark	25	Norway	29	Norway	31
Iceland	41	Sweden	31	Sweden	33	Sweden	36

Source: Data collection ITU, ICT Price Baskets, ranking of countries based on purchasing power parity of US dollar, PPP\$.

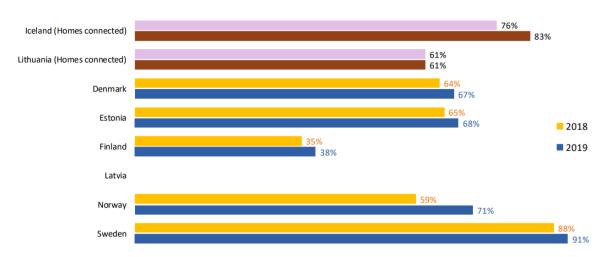
https://www.itu.int/en/ITU-D/Statistics/Pages/ICTprices/default.aspx

In 2019, Iceland was the most expensive of the Nordic countries, in 41st place of European countries, when the line charge was included in the calculation for the first time for this comparison. It is therefore not logical to say that pricing of service is conspicuously lowest in this country, though there had been some difference in 2018, but the line charge was not then included in the calculation.

The PTA sought information from its sister institutions in the Nordic countries and investigated where there was a separate line charge in retail in those countries. It seemed that a line charge was hardly known in the Nordic countries, and had mainly been used in a number of countryside networks in Sweden, but such charging appeared to be on the way out among them. The main rule in those countries appears to be that costs incurred for local loop lease are directly recouped in the retail charge for the service. In the United Kingdom for example it has not been authorised to advertise a separate price for service and line charge since 2016, and retailers must show consumers the full cost of broadband service, though the charges may be separated on the invoice.

Fibre-optic network distribution is extensive in all the Nordic countries, but least in Finland. The PTA participates in Nordic cooperation on collection of statistics, and the working group report for 2019 shows that distribution is most in Sweden, while Iceland is in second place.



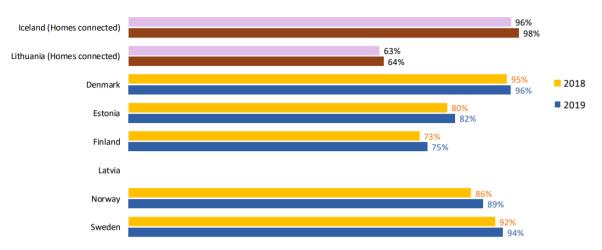


Source: https://pfs.is/fjarskipti/gagnatorg-pfs-og-tolfraedi/norraenn-samanburdur-a-fjarskiptanotkun/

Deployment projects in Iceland end when the demarcation point is installed at the external wall (home connected), while in the other Nordic countries, the installation ends when the cable is installed at the kerb (home passed), ready for laying cable to the building and dwellings. In both instances, the scheduled civil works are completed, and the household can order service. This means that it is possible that Iceland has gone further in distribution than Sweden if we only count households where the demarcation point is installed at the external wall (home connected).

Distribution of networks that can carry 30 Mb/s capacity and greater are most in Iceland.





It was also correct when Siminn says that lowering prices could provide indications of the competition level on a specific market. It was however the assessment of the PTA, after having examined a great number of factors, such as market shares and their development, vertical integration of Siminn, competition problems, etc., that effective competition did not pertain in this country on the relevant wholesale markets and downstream retail market. The PTA points out that the Siminn market share was over 46% in by the end of 2020 and had not decreased much since 2014, and that the Míla market share on Market 3a was 57% at end of year 2019 and 57% on Market 3b. These are considerable high market shares.

Siminn also pointed out that the quality of Internet connections had increased in this country. At the beginning of 2015, fibre-optic connections had been 27.5% of connections and this had now risen to 62.8% at end of year 2019. About 80% of homes had access to fibre-optic local loops today. It was in fact stated in the market analysis that distribution of fibre-optic was among the best known in Iceland. How it could be that competition was not effective, was a mystery to Siminn, in the light of the above. When analysing whether competition was efficient, it would be normal to take into account parameters resulting from competition, such as lower price, increased quality of service and innovation. The PTA had not considered any of these parameters.

It is not true that the PTA had not taken the parameters in question, into account in its analysis. Here above in Section 3 there was discussion on prices. At the end of the year 2020 64% of connections were over fibre-optic. At that time, 83% of households and companies in this country had the option of a fibre-optic connection (87% of households and 63% of companies). It is correct when Siminn says that the status of fibre-optic distribution in this country is among the best known in Europe. That on its own does not however say anything about whether efficient competition pertains. The PTA points out that Míla has executed rapid and wide-reaching fibre-optic development during the last 5 years, while companies like GR and Tengir have been involved in such development over a much longer period of time, well into the second decade. Míla fibre-optic plans are furthermore more ambitious than the plans of their competitors throughout the lifetime of this analysis, and it is the assessment of the PTA that there will be little difference between the companies' fibre-optic distribution at the end of the lifetime of the analysis. At end of year 2020, 83% of homes and companies had the option of a fibre-optic connection, and the PTA expects that this proportion will have reached about or over 90% at end of year 2023.

Siminn finally indicated the entry of Nova in the Capital City Area, where, in a few years the company had achieved a 20% share. This fact was not an indication of major access barriers, quite the contrary. The company could easily increase the number of its connections by offering Internet service across the whole country. Nova was the company that had gained most customers during 2019.

At the end of 2020, the Nova market share was 14.7%, which is significantly less than Siminn suggests although it was based on the end of 2020 and not the end of 2019 as Siminn did. Nova commenced its entry into the market in 2016, and that year had 1.5% market share, 5% at the end of 2017, 9.6% at the end of 2018, 12.4% at the end of 2019 and 14.7% at the end of 2020. The Nova increase had considerably decelerated in the year 2020, and there are many indications that this growth in company market share will slow down even more, particularly when one considers that Siminn has now made an agreement for entry into the GR fibre-optic network, where it is expected that Siminn will begin offering its service in the latter half of 2021. One can expect that when this happens, Siminn will gain a certain proportion of the customers of other service providers that had been on the GR network, including Nova. Nova does not enjoy the same economies of scale and scope as Siminn and most of the company's connections are in the GR operating territory in South West Iceland. Nova has among other things, complained that trunk line lease, to be able to reach further into the countryside, is expensive.

Hringdu had 8.6% market share at the end of 2020 and had 5.4% share at end of year 2015. That company has increased its share slowly but steadily during the period. The Vodafone proportion has however significantly decreased, having been 27.7% at the end of 2020 after having achieved a high of 37.1% at end of 2017 after the merger with 365 miðlar. Siminn had 46.3% market share at the end of 2020, which is little less than the company had at the end of 2016 (47.9%). Siminn market share was at its lowest at 45.9% at end of year 2017, and the share is now somewhat higher than it was 3 years ago. At end of 2017, Siminn customers were 61,857 and had become 65,637 at the end of 2020, which represents an increase of 3,780 customers.

In the opinion of the PTA, it is clear that Siminn has held its own extremely well and has in reality, increased its market share during the last three years. At the same time Nova has done rather well, particularly during the years 2016-2018, but Vodafone has suffered significant decline. It is therefore clear that the Nova growth has not been at the cost of Siminn, but at the cost of other Siminn competitors. Even if Nova were to make an entry outside the Capital City Area with greater intensity, this would not significantly change the picture, particularly when one considers that Siminn will commence service over the GR fibre-optic network in the latter half of 2021.

10.1 In general on obligations

Stykkishólmsbær considered it important to create an environment that supported continued development of the fibre-optic network in urban kernels in the countryside, in accordance with the Althingi policy in electronic communications for the years 2019-2033, where the objective was that fibre-optic rollout would continue to be a priority project and fibre-optic connections to all legal abodes and workplaces in Iceland would be completed no later than 2025. Stykkishólmsbær encouraged the PTA to take particular care not to impose obligations on electronic communications companies that could inhibit further development in the countryside.

The position of the PTA

The PTA does not consider that it is imposing obligations on Míla that could hinder continued fibre-optic rollout in this country in accordance with the Icelandic government's electronic communications plan. This is particularly so after the Administration proposed to retract the intention to impose an obligation on Míla for cost analysed tariff for fibre-optic and planned instead to impose an ERT obligation on the Siminn Group, which provides more latitude in pricing. The PTA furthermore points out that more electronic communications companies and municipalities have been deploying fibre-optic networks, with or without state aid, and the PTA considers that this development will continue throughout the lifetime of the analysis. Nor is it inconceivable that the Telecommunications Fund will, when fibre-optic rollout in most of the sparsely populated areas is concluded in 2021, direct its attention at providing state support for urban kernels in the countryside where there may be market failure. Míla has for example developed fibre-optic networks in the countryside with state aid subsequent to call for tenders, though municipalities themselves have been most active in this respect, up to this point in time.

Snæfellsbær submitted a comment that related to all inhabitants in urban areas of Snæfellsbær being assured adequate network connections. The municipality has already received a grant from the Telecommunications Fund to deploy powerful network connections in rural areas in Snæfellsbær and this project has proved its worth. On the other hand, the situation is such in urban kernels (Hellissandur, Rif and Ólafsvík) that progress was very slow in fibre-optic rollout in the urban areas, and there were no plans relating to whether and then

when this development would be completed, which was most unsatisfactory for inhabitants in the municipality, and in fact an unacceptable state of affairs.

For this reason, Snæfellsbær felt it extremely important that an environment should be created that supported continued development in urban kernels in the countryside, and the municipality wished to encourage the PTA to be particularly careful not to impose obligations on electronic communications companies that could hinder further development in the countryside. It was important to create an environment that supported continued development in urban kernels in the countryside, in accordance with the Althingi policy in electronic communications for the years 2019-2033, where the objective was that fibre-optic rollout would continue to be a priority project and fibre-optic connections to all legal abodes and workplaces in Iceland would be completed no later than 2025.

It was clear that the importance of having good Internet connections was something of great importance, and particularly for parties that were using electronic communications networks in their communications. It had also come to light in the winter of 2019-2020, how important it was to have good Internet connections.

The position of the PTA

The PTA refers to its prior reply here above with regards to the comment from Stykkishólmsbær, as the comments are similar in nature.

Fjarðabyggð wish to emphasise that in the PTA analysis of electronic communications infrastructure and related marketing issues, full consideration needed to be given to needs and parity between differing market areas and circumstances where building density and number of inhabitants or companies were not an adequate incentive for offer of service. The incentive for electronic communications companies in a competitive market to provide service was based on the calculated profitability for defined market areas, and it had been demonstrated that urban areas in Fjarðabyggð were not areas where electronic communications companies sought to operate in, with the result that they had been left behind while at the same time there had been fibre-optic rollout to defined rural areas in the municipality.

Various measures taken by the PTA, that would constitute hindrances or restrictions of some kind, because of competition considerations, must not discourage or constitute barriers for necessary development of electronic communications infrastructure within Fjarðabyggð. For this reason, each decision of this kind should be given careful consideration with the interests and parity of users in the forefront, wherever the location in the country.

The position of the PTA

The PTA refers to its prior reply here above with regards to the comment from Stykkishólmsbær, as the comments are similar in nature.

Mila commented on paragraph 1148 in the preliminary draft, where it was stated that when choosing obligations to be applied, to resolve defined competition problems, one needed to have a number of basic principles in mind. All obligations imposed should take into account the nature of the specified competition problem and should be designed to solve it. They

should be transparent, justifiable, reasoned, and in line with the objectives they are designed to achieve – that is, to promote competition – as well as contributing to the development of the internal market and safeguarding users' interests. Obligations must be proportionate and might not impose heavier burdens on operators than was deemed necessary.

It was stated by Míla that with this decision, the PTA was imposing heavier burdens on Míla than were necessary, which was contrary to the ESA recommendation. There was considerable competition in the Capital City Area, where GR had similar and, in some areas, more market share (Reykjavík og Seltjarnarnes) than Míla. Prices varied and the development had shown significant mobility. To impose price control on Míla in this area was significantly burdensome. All price changes took considerable time, and while Míla was awaiting a conclusion, the party that should in reality have received the obligation (GR) would have all the flexibility and thus gain an abnormal advantage.

Apart from that, single price would lead to Míla's competitive position worsening in a competitive area where local loops were less expensive, i.e. the cost of unprofitable and costly areas were being transferred to more economic areas. This meant that GR could offer lower prices (as it had possibly even more economy of scale than Míla), and could react quickly to changes on the market, both with product offer and pricing.

Míla considered that the PTA plan was based on a foundation which was a very weak analysis of the market and that the Administration intended to tighten the rules on Míla, totally without there being any necessity to do so. In this connection, Míla objected to the PTA using Siminn market share as a basis for imposing further obligations on Míla, as Míla was a wholesale company with an independent board. These PTA forms would lead to Míla being ruled to have market dominance on Market 3a in a number of municipalities where the company had little, or no market share now, or at least during the lifetime of the analysis.

The position of the PTA

The PTA disagrees with the Míla view that the PTA plans to impose heavier burdens on the company than necessary. Given the real and potential competition problems that the PTA has identified, and discussed in detail in Section 10.2 in the revised analysis (Appendix A), as well as in the same Section of this document, the PTA considers that it has respected proportionality with the imposition of obligations, particularly after the Administration decided to retract the intention to impose an obligation for cost analysed prices on Míla fibreoptic, and to prescribe instead an ERT obligation on the Siminn Group, which provides it with more latitude with respect to pricing. The PTA has further increased the number of areas where lighter obligations will apply.

The PTA reiterates that the Administration considers there to be no reason to segment the relevant wholesale markets geographically in this country, regardless of whether it is the Capital City Area or other areas. Reference is made to the detailed geographic analysis in Sections 5-7 in the revised analysis and to the same sections here above. The PTA however considers there to be reason to apply varying obligations by area, and to apply lighter obligations in areas where there is more competition, including in the Capital City Area. In geographic analysis, the PTA considers it necessary to take into account, among other things the Siminn retail share, as Míla is a subsidiary of Siminn and in 100% ownership of that

company. This is in accordance with circumstances in this country and precedent from Europe.

Míla refers to the fact that the company would, all things being equal, be considered to have a dominant market position on Market 3a in a number of municipalities where the company had little, or no market share now, or at least during the lifetime of the analysis. The PTA points out that Míla has a copper local loop network with almost national coverage, and in the opinion of the PTA this will continue to be the case with Mila's combined copper and fibre-optic net, until the end of the lifetime of the analysis, as Míla will first and foremost phase out its copper network where the company has developed its own fibre-optic network or ensured control of such networks. Míla has been responsible for rapid and extensive fibre-optic rollout in recent years, and according to information from the company, this development will continue vigorously throughout the lifetime of the analysis. If there is any area where Míla will not own or have long term control over a local loop network (copper or fibre-optic), it would be in a very sparsely populated area that is of minimal significance for the overall picture, where local loops are counted in tens or hundreds at most but not of thousands.

The PTA also totally rejects that the PTA plans are based on a weak analysis. The market analysis here under discussion is by far the most wide reaching of any analysis that the PTA has conducted up to this point in time, and the PTA considers that it is well implemented and describes well the competitive conditions on the relevant wholesale markets and related retail market.

Míla commented on paragraph 1149 in the preliminary analysis where it was stated that in the report of the European Regulatory Group of National Regulatory Authorities (ERG) on obligations, that the emphasis was on building up competition in electronic communications networks where this was considered feasible. In such instances the imposed obligations should support such development. When infrastructure-based competition was not considered desirable due to significant and persistent economies of scale and scope or other barriers to entry, it was necessary to guarantee sufficient access to electronic communications networks and equipment at wholesale level. In this context, it was necessary to ensure two things: first, to encourage service-based competition; and second, to guarantee a sufficient fee for access to existing electronic communications networks, thus providing an incentive for further investment in such networks, as well as for their renovation and maintenance. In addition to the above specified ERG report on obligations in general, the PTA also took account of the document on the BEREC Common Position on obligations on the wholesale market for network access to fixed line networks, which was published in 2012.

Míla said that single price was in direct contradiction with this. Míla had to be able to offer a higher price in those areas that were more expensive, in order to compete in competitive areas. Another option was that Míla would sell all the unprofitable areas to those that did not have such obligations or would stop development in those locations. This was very clear in Iceland. GR developed in urban areas, but not yet in the countryside, which was much more expensive. This should be clear to the PTA after having received a Míla application from the Universal Services Fund which showed how much more expensive it was to operate systems in the

countryside, even in urban kernels. The PTA appears to have completely ignored the fact that, although there only remained about 20-25% of homes and companies across the country that had to receive fibre-optic rollout, they were the most expensive areas, apart from those where the state had already funded development.

One also had to take account of the fact that Mila has only deployed fibre to about 25,000 addresses across the country and they included about 50% of homes and companies So it remained for Mila to deploy to about 56,000 addresses, if one did not allow for Mila deploying additional fibre where a company already had access to fibres from other parties. With this market analysis, it was clear that Mila would not deploy more than a small fraction of the addresses that remained, except with a significant grant from the state. The PTA was thus not making a correct assessment in thinking that deployment of fibre-optic systems was being completed, at least not on the part of Mila.

There was also the question of whether the PTA was saying with this, that where there was one fibre-optic from a party other than Míla, Míla should not deploy another one. Míla therefore asked whether the PTA measures were designed to protect Míla competitors and to maintain their monopoly, where Míla had not deployed fibre-optic. It was at least clear that the PTA was not following the report in question from ERG on it being desirable to build up competition in fibre-optic infrastructure "where this was considered feasible".

The position of the PTA

The PTA reiterates that subject to additional consultation, the Administration had retracted the intention to impose an obligation for cost-oriented tariff on Míla fibre-optic and planned instead to impose an ERT obligation on the Siminn Group. This provides the Siminn Group with additional latitude in pricing and should support continued Míla fibre-optic rollout, including in the countryside.

The PTA cannot see that the Míla assertion that the company had only deployed fibre-optic to about 25,000 addresses nationally make sense, based on data that the Administration gathered from the company in the autumn of 2020, unless Míla is only talking about the fibre-optic connections in the countryside. Then it is stated that at end of year 2020, spaces would be just under 94,000, including about 74,000 in the Capital City Area. It is therefore clear that Míla is far from painting a true picture in the above specified comment. The PTA assesses that the country's fibre-optic rollout will be very well advanced at end of year 2023, whether that is by Míla or by the company's competitors. It is furthermore clear in the opinion of the PTA that areas where two fibre-optic networks will be on offer, will increase significantly during the lifetime of the analysis. Apart from that, Míla has a copper local loop network that has close to national coverage.

The PTA considers it important for competition on electronic communications networks in this country that there is competition between electronic communications infrastructure at as many locations as possible. It is then another matter, whether competition is effective, even where one electronic communications infrastructure company is competing with Míla in a specific area or areas. As stated in Sections 8 and 9 in the revised analysis (Appendix A) the PTA considers that this is not the case and will not be at the end of the lifetime of the analysis.

Siminn considered it inevitable that in policymaking in market analyses, the PTA policy should be in accordance with the policy of the Althingi, which was formed on the basis of the budget and was bound by that policy. The PTA as an institution was part of the executive and as such, the Administration was bound by the wishes of the Althingi as the legislature.

In the Act on the Post and Telecom Administration, it states, in paragraph 1 of article 3 regarding the role of the PTA: 1) implementing the Electronic Communications Act and supervising electronic communications as provided for in detail in the respective Acts. The PTA is to enforce the Acts and support the achievement of their objectives; 2) encouraging competition in postal and electronic communications services and preventing unfair business practices, for instance, by: a) working to prevent distortion or limitation of competition on electronic communications and postal service markets, b) encouraging efficient investment in electronic communications infrastructure and promoting innovation,

According to the above, it was the role of the PTA by law to encourage *efficient investment in infrastructure*. The policy of the legislature on the objective that the PTA should look to be the Parliamentary Opinion on policy in electronic communications for the years 2019-2033, which stated that 99.9% of homes and companies, should have access to fibre-optic connections. In the Parliamentary Opinion on the 5-year electronic communications plan for the years 2019-2023, the intention was that 95% of homes and companies should have a fibre-optic connection at the end of 2023, which was the end of the lifetime of the PTA analysis. The PTA was, as part of the executive, and with the statutory role of encouraging efficient investment in infrastructure, bound by these objectives of the Althingi in its work, including in analysis and imposition of obligations related to fixed line service. This was therefore one of the objectives that the PTA had to observe, as it was in accordance with the objectives of the Electronic Communications Act, by which the PTA was also bound. The objective of the Althingi was to support fibre-optic rollout because the Althingi had so judged that such a measure was positive for consumers and companies.

It was not for no reason that all NRAs in Europe kept in mind in market analysis, how to support increased fibre-optic rollout, and the PTA should not be exempted in this respect.

The position of the PTA

The PTA does not consider the conclusion of this market analysis here under discussion to be contrary to the policy of the Icelandic authorities in electronic communications to the year 2023, nor to the policy to 2033. The PTA considers that the obligations that the Administration plans to impose on Míla are not conducive to slowing down the extensive fibre-optic rollout that has taken place during recent years. The PTA also needs to take care with regards to competition considerations in its market analyses, and the Administration considers that it has taken a balanced path between the above specified considerations.

The PTA also rejects that the conclusion of the market analysis in question is contrary to the provisions of paragraph 1 of article 3 of the Act on this Administration, which among other things, encourages efficient investment in electronic communications infrastructure and supports innovation. This is even more applicable after the PTA announced that it would retract its intention to prescribe an obligation on Míla for cost-oriented tariff for the company's fibre-optic, and to prescribe instead an ERT obligation on the Siminn Group.

Siminn said that in its analysis, the PTA had referred to fibre-optic rollout having already taken place and that only a small part of the country remained for fibre-optic rollout. The above specified assertion was extraordinary, to put it mildly. It thus seemed that the PTA did not intend to do anything to support that those areas that did not enjoy fibre-optic, would get such service. Siminn pointed out the obvious fact that there were still large parts of the country that had not received fibre-optic rollout. A large part of East Iceland, for example, had not yet received fibre-optic rollout.

In the PTA preliminary draft, there was a total lack of investigation as to how large an urban area needed to be for it to be feasible for the private sector to deploy fibre-optic. This was key information for market analysis for the purpose of predicting how likely it was that a party would deploy fibre-optic in the relevant municipality, and how one could support that such an investment could come to fruition.

It was undisputed, that fibre-optic could return better quality than xDSL service. The difference today had become much greater than in 2013 when the last analysis was made. Competition was not an objective in itself, but the results that competition returned, i.e., increased quality for people and companies, innovation, growth, progress, increased purchasing power, increased economic growth for the nation, etc.

In its proposals, the PTA was preventing competition and lessening incentive for deploying fibre-optic, particularly where such investments were risky.

It was perfectly obvious that GR had deployed fibre-optic to all homes in its operational territory and was deploying fibre-optic in Árborg and Reykjanesbær and would also commence in the Vogar municipality. Siminn would offer its bitstream service over the GR system.

Míla had upgraded its system, such that part of the Míla system also had fibre-optic to homes, but the Míla system was on the other hand, only about 60-70% of the GR system. Tengir had deployed fibre-optic to most homes in the Eyjafjörður area and aimed at 11,000-12,000 connections in the coming years. Míla had only deployed fibre-optic to a small degree in the Tengir operational territory. The operational territories of Tengir and GR covered about 70-80% of the country. Míla had to some extent deployed fibre-optic outside the Tengir and GR territories, and the Iceland Digital Connected project had been used to rollout fibre-optic to the country's rural areas to some extent. It was appropriate to note, that in the PTA analysis, there was no realistic assessment made of whether Míla could, during the lifetime of the PTA analysis, equal the fibre-optic systems of GR and Tengir in size.

There remained about 20-25% of the country to which fibre-optic had not been rolled out, and where a solution had not yet been found for such rollout. In the opinion of Siminn, the PTA had not succeeded in categorising the country on the basis of the needs faced by each area for electronic communications, which should however have been a key task.

The position of the PTA

The PTA agrees with Siminn that a large area of the country had not yet received fibre-optic rollout, except in very sparsely populated areas with a grant from the Telecommunications Fund. On the other hand, a large proportion of the country's inhabitants had the option of a

fibre-optic connection today, 87% of the households and 63% of the companies or 83% combined at end of year 2020.

It is not true that the PTA does not plan to do anything to support that areas that do not have fibre-optic connections receive such connections during the lifetime of analysis. The PTA plans among other things to retract its intention to prescribe an obligation on Mila for cost-oriented tariff for the company's fibre-optic, and to prescribe instead an ERT obligation on the Siminn Group. This gives the Group more latitude in pricing but nevertheless imposes certain limitations on the Group, which the PTA considers important to support an even greater increase in competition. The PTA also intends to strengthen the obligation on Mila to provide information on free space in the company's ducts in areas where there is less competition, so that the access obligation to such infrastructure will be better utilized in the installation of fibre-optic cables. The PTA disagrees with the Siminn assertion that the PTA, with its analysis, is lessening the incentive for fibre-optic rollout, among others, in rural areas. The PTA could of course not ignore competition considerations in its market analysis.

It is however not within the remit of the PTA, but rather of the Telecommunications Fund, to provide funds in the form of state aid for fibre-optic rollout in areas where market failure pertains, and the PTA expects that this development will continue throughout the lifetime of the analysis and even longer. Nor does the PTA consider it to be within its remit to conduct detailed analysis of how large an urban area needs to be for it to be feasible for the private sector to deploy fibre-optic on commercial terms, and on when state aid is justifiable. This is within the remit of the Telecommunications Fund, under surveillance from ESA.

Although the Míla fibre-optic network is rather smaller today than the combined fibre-optic networks of GR, Tengir, Snerpa and Austurljós, recently most of the effort has been in Míla fibre-optic rollout, and according to data from electronic communications companies, this will be the case throughout the lifetime of the analysis. This means that the gap between the Míla fibre-optic network and those of its competitors will shrink significantly during the lifetime of the analysis.

The PTA also agrees with Siminn that fibre-optic generally return better quality than xDSL, in particular in terms of capacity. The PTA considers that fibre-optic networks are the better option for the future, but nevertheless comes to the conclusion, among other things subsequent to a detailed consumer survey, that there is still substitutability between connections over copper and fibre-optic networks and that this will be the case throughout the lifetime of the analysis.

Siminn said that it was clear that the obligations that the PTA proposed, would not serve the key role of strengthening development of fibre-optic systems where such systems had not been deployed, quite the contrary. The project, Iceland Digital Connected, concerns itself with areas where there was no likelihood that parties to the market would deploy fibre-optic systems. Siminn believed that this was undisputed among parties to the market.

Then there remained urban kernels where this task remains unresolved. In most urban kernels, VDSL service was on offer which could return about 50-100 Mb/s speed depending on

whether the conditions for vectoring were available or not. The electronic communications Administration in Sweden had asserted that copper connections could not achieve the same speed as fibre-optic connections did today, and that for this reason they were not on the same market, and objections to this assessment have been raised by the EU.

It was however obvious that when one considered the policy of the authorities to achieve fibre-optic roll-out across the whole country, that the xDSL system would be closed when fibre-optic had taken over. This was the objective that the PTA should aim for, i.e. to encourage efficient and economic development and elaborate positive incentives that were conducive to Míla being able in an easier manner to justify replacing the xDSL system with fibre-optic to homes and that Míla and other infrastructure parties could see an advantage in embarking on fibre-optic rollout.

The PTA had needed to categorise urban areas on the basis of whether it was likely that parties to the market would deploy fibre-optic networks in competition with Míla during the lifetime of the analysis. If this was unlikely, then obligations would have to be imposed, such that Míla was more likely to replace the xDSL system with fibre-optic to the house.

If it was likely that the market would deploy fibre-optic, then regulatory control should be such that it encouraged that such deployment should be implemented, possibly in cooperation with Míla or alone on its own initiative and thus strengthen competition and efficiency in development.

The position of the PTA

Here above, the PTA has answered the Siminn comments that the obligations that the PTA plans to impose on Míla will not lessen investment incentive to electronic communications infrastructure companies for fibre-optic rollout. Reference is made to this. In 2022, the Telecommunications Fund project for supporting fibre-optic rollout in the most sparsely populated parts of the country will end, and that project will have returned more than 6000 fibre-optic connections in the country's most sparsely populated areas. The latest construction work for that project could, however, extend to the year 2023. In the opinion of Míla, it is not inconceivable that the Telecommunications Fund will subsequently support fibre-optic rollout, in smaller urban kernels, where there is market failure. It is however not within the remit of the PTA to assess whether such circumstances pertain in such urban kernels. It is however clear that such state aid, should it be granted, will expedite fibre-optic rollout in the country's rural areas. In the opinion of the PTA, the country's fibre-optic rollout will be very well advanced by the end of 2023. The PTA then considers that cooperative projects of electronic communications infrastructure companies could continue to increase during the lifetime of the analysis, and they have generally shown good results in recent times.

Once again, Siminn refers to the fact that PTS in Sweden came to the conclusion that there was no longer substitutability between xDSL connections and fibre-optic. The PTA has here above, answered this comment. The PTA reminds that in Sweden, VDSL connections are generally not available which means that the copper networks in Iceland have much greater capacity than the copper network in Sweden, and in addition to this, a recent consumer survey that the PTA commissioned indicates that there is still substitutability between copper and fibre-optic connections in this country and in the opinion of the PTA it will remain in place throughout the lifetime of this analysis, regardless of what may subsequently transpire.

The PTA disagrees with Siminn that the PTA intends to impose obligations on Míla that discourage the company from replacing xDSL systems with fibre-optic network. Not least since the Administration announced that it would retract its planned obligation for a cost oriented Míla tariff for fibre-optic, and instead prescribe an ERT obligation on the Siminn Group.

Síminn pointed out that price control on Míla fibre-optic could lead to a party that had planned to deploy fibre-optic, being less interested in deploying fibre-optic, knowing that the cost of such a project for the party in question would always be higher than cost that took into account Míla single price, and Míla pricing pursuant to price control would be lower than that of the new party. It was likely that the Míla single price would be lower than all those parties that had deployed fibre-optic in the country, as those areas would thus be subsidised by areas that were more profitable on the basis of costs. Even though this was in itself good for the purchaser (i.e., electronic communications company), it directly lessened the incentive to invest in fibre-optic. It could discourage new parties from investing, if they considered that Míla would commence development in that area and was obliged to price them off the market, while at the same time, Míla would be less likely to enter new areas because the investment was unlikely to provide returns.

The PTA should rather look at strengthening fibre-optic rollout and strengthening competition in bitstream service, where it was feasible to operate such service. Increased competition in bitstream would in the opinion of Siminn, be conducive to strengthening competition. If the arrangement in Sweden were used as precedent, then it would be an exception that parallel fibre optic systems would be deployed, but against this there would always be increased competition in bitstream service.

Competition on deployment of fibre-optic itself in the countryside, and competition on other such costly projects outside the main urban areas was in the opinion of Siminn less conducive to strengthening competition, but rather conducive to increasing the cost of the service, as there was no difference between inactive fibre-optic as such, but rather a difference between the active technical layer in the service.

The PTA analysis failed to analyse these factors. The obligations that the PTA was considering and had notified, would have the effect that the objective of the legislature for fibre-optic rollout to the whole country would be delayed. The obligations would create the economic reality that it would in fact be more sensible for Míla to continue to operate the xDSL system unchanged in large parts of the country. The PTA plans would also probably have the impact that there was less likelihood that competition in bitstream service would increase and in fact the PTA proposals would simply have a negative impact on competition and efficient development of telecommunications in Iceland. In this way, the PTA proposals would literally contradict the purpose and defined tasks of the PTA, pursuant to the law. The impact on the GR operational territory would be such that as Míla was subject to obligations and GR not, then GR would slowly but surely continue with the same development as before and grow in both local loops and bitstream connections during the next 2-3 years, without Míla being able to exercise competitive restraint. [...]

The position of the PTA

The PTA reiterates that the Administration plans to retract the intention to impose an obligation on Míla for cost analysed tariff on fibre-optic and to prescribe instead an obligation on the Siminn Group for passing an ERT test, which provides the Group with greater latitude in pricing and should therefore not inhibit the company's fibre-optic development nor that of other parties in the more rural areas. It is correct when Siminn states that prices that are too low with Míla in areas where the development cost is higher than in urban areas, could have been discouraging for Míla competitors, but the changed plans of the PTA take, among other things, this issue into account.

The PTA also agrees that endeavours should be made to strengthen competition in bitstream service, where it is not realistic to deploy two separate fibre-optic networks. For this reason, the PTA plans to apply appropriate obligations on Míla on Market 3b, and the PTA can only impose obligations on a company that has been designated as having SMP, and it is the conclusion of the PTA that this is only Míla on the relevant wholesale markets. It is however not for the PTA to decide where a dual fibre-optic system will be developed and where there should be only one such network. The market must decide that for itself. The role of the PTA is to set the rules of the game for competition.

In other respects, one must view the above comments from Siminn in the light of the fact that they describe reactions to planned obligations for cost-oriented tariff, which the PTA now plans to retract.

Siminn considered there to be reason to note that Siminn and GR had come a long way in reaching an adequate agreement on Siminn access to the GR system, i.e. through GR bitstream service, and thus through GR fibre-optic.

Siminn was looking for an agreement with GR, such that Siminn could offer its service, i.e., Internet service and other electronic communications service over the GR system in the GR operational territory, in the same manner as other electronic communications companies can do. This had some significance for the likely development in the GR system, and in the opinion of Siminn, it would lead to an increase in the number of connections with GR, both in bitstream service and local loops. In any event, the agreement between Siminn and GR had considerable significance as the PTA appeared to assume that Siminn would not come to an agreement with GR during the lifetime of the analysis.

Siminn had requested an agreement with Tengir for access to the company's bitstream service, and thus cases that related to Siminn access to Tengir fibre-optic in those areas where Mila was not interested in using the Tengir fibre-optic, should now be closed. Tengir had not replied to the Siminn request for an agreement, and for this reason, negotiations had not reached the same level as negotiation with GR. It was however likely that negotiations between Siminn and Tengir would be somewhat easier than those with GR. It was not known how the technical implementation would be managed for Tengir bitstream service.

The position of the PTA

In July 2020, sometime after the PTA preliminary analysis was open for consultation at the end of April of last year, Siminn and GR came to an agreement on Siminn entry into the GR

fibre-optic system, in the form of bitstream access. Siminn began offering service in late August 2021 and that Siminn will then begin selling service on the GR system. As stated in the Siminn comments, Siminn has requested such access to the Tengir systems, but there is no agreement in place, and it is not certain whether or when this will happen.

Earlier in this document, the PTA explained its position with respect to the potential impact of the agreement in question between Siminn and GR, both on the relevant wholesale markets and related retail market, during the lifetime of the analysis.

First, one must expect that the Siminn market share will increase from the 46.3% share that the company had at the end of 2020, and it is not inconceivable that it will have reached over 50% at the end of the lifetime of the analysis, all things being equal.

On the other hand, it is likely that the agreement will, all things being equal, somewhat reduce the Míla share on the relevant wholesale markets, but nevertheless, the PTA considers that the Míla share will continue to be over 50% on both wholesale markets at the end of the lifetime of the analysis. It is clear that not all Siminn customers on the GR network will come from Míla, as it is clear that a significant proportion of them will come from other service providers that are already on the GR system. The PTA considers it not injudicious to estimate that this will be approximately half or even something over that. The agreement allows for [...]% of the total number of Siminn customers on the household market having a bitstream connection over the GR fibre-optic at the end of the more precisely defined reference time which is [...]% years. In the opinion of the PTA, it is clear that this agreement will not have any definitive impact on market share on the relevant wholesale markets during the lifetime of this analysis. Nor is it inconceivable that service providers, other than Siminn, that now have most of their connections with GR, will increasingly move over to Míla, during the period of validity of the analysis. This would strengthen Míla's position at the cost of GR.

10.2 Competition problems

10.2.1 General

GR considered that it had experienced various competition problems in competition with Mila, and particularly in the light of the strong market position of Mila on Market 3a, as on other markets, as the Siminn Group had repeatedly breached competition law, most recently with respect to English football, and breaches against paragraph 5 of article 45 of the Media Act, which was confirmed with the judgement of the District Court of Reykjavík on 1 July 2020. In the light of the above, it was reasonable to take into account the number of paragraphs in the market analysis draft that further demonstrated the Siminn Group market strength, see paragraphs 1168, 1183, 1189 and 1241. Because of this, it was appropriate to specifically assess obligations that rested on the parties with market dominance and to specifically examine the markets to which products and services belonged and that Mila could not arrange this at its own convenience, see complaint from GR to the PTA about pricing of GPON against Ljóslína.

The position of the PTA

The GR comment supports the PTA description of competition problems on Markets 3a and 3b and related markets. With respect to the comment on the distinction between markets, it discusses distinctions between Markets 3a and 4. It should be noted that the PTA has, subsequent to additional consultation in the autumn of 2020, retracted the intention to move Míla Ljóslína from Market 4 (previously Market 6) over to Market 3a and the PTA has furthermore retracted for the time being, the intention to impose an obligation for cost-oriented tariff for fibre-optic local loops on Market 3a. The PTA will direct its attention at the location of specific solutions for companies on the service markets, for surveillance and revision of reference offers and tariffs, and for analysis on Market 4 which is intended to be completed in the latter half of 2021.

Míla said that one of the issues that the PTA had specified in the preliminary assessment as being able to have an impact on the decision on imposition of obligations for alleged market strength was "communications with competitors". It was specifically rejected that Míla had applied such alleged strength against the company's competitors, or that the PTA could justify imposition of obligations on Míla on the grounds of such unilateral assertions from Míla competitors that did not hold in any way.

The position of the PTA

The PTA emphasises that behaviour of vertically integrated companies with SMP in communications with smaller competitors is generally considered to be a problem if obligations are not in place. It is not a condition for applying obligations that such problems have in reality arisen, particularly not where obligations have been in force on the market for many years. In the analysis, the PTA specifies a number of instances where competitors have complained about the behaviour of the Siminn Group. In some instances, these are cases where administrative decisions have been taken that confirm that breaches have taken place. The PTA furthermore describes a number of reasons for complaints from parties to the market where administrative or courts decisions have not yet been made. The PTA considers it important that these comments from competitors are aired, but the PTA does not use them in isolation as the basis for a decision on obligations unless there is irrefutable proof of behaviour that could inhibit competition.

Siminn says that in the Capital City Area, it is established that fibre-optic has been deployed everywhere by one company, GR, which has been deemed by ESA to enjoy state aid, but is not subject to obligations.

The only competition problems on the market can be traced to the fact that GR, which was in public ownership, has been allowed to enjoy state aid without the PTA having intervened. ESA had confirmed this aid and was now awaiting explanations of the authorities about the provision for exceptions in the EEA agreement to which this support might belong, or whether it had simply been illegal. In the shelter of this support, GR had achieved over 50% share in its territory, both with respect to local loops for Internet service and for bitstream service. This case was now being reviewed by ESA and it was clear from the preliminary conclusion of ESA that the PTA should have intervened earlier and ensured that GR was funded in a

normal manner. In the light of the fact that this was a case of state aid, the conclusion had to be reached that GR was obliged to give companies access to grey fibre.

The PTA had repeatedly asserted that GR funding was in accordance with electronic communications legislation rules and had also asserted, quite contrary to the truth in the case, that the ESA had processed that issue of contention as to whether or not this was a case of unlawful state aid. As is well known, ESA had only examined limited GR funding for the years 1999-2001, and not generally whether GR funding was state supported. Simin made the demand that the PTA explain why clearly incorrect assertions had been put forward and subsequently used to justify obligations on a wrong party. It had now come clearly to light that GR funding had neither been in accordance with electronic communications legislation nor with the EEA agreement, subsequent to repeated complaints from Siminn and the tens of billions of state aided investments by GR in the meanwhile. Up until 2015, the GR increase had been about 3000 connections per annum, but during the years 2016-2018 the increase appears to have been in excess of 6000 per annum, which was hundred percent increase over the years prior to 2016. At the same time, the PTA had maintained that Siminn had damaged competition between Mila and GR, and it was precisely then that GR had competed more successfully with Míla than in the years before. There was thus no relationship between the PTA conclusions and available data.

Siminn furthermore pointed out that in the PTA discussion the advantage that GR had gained through its ownership connection with OR was omitted, and it was established that GR had received funds on loan from OR, which the ESA had deemed to be state aid. The only possible doubt that ESA considered to be in the case was whether this was justifiable state aid, not whether it was state aid.

The position of the PTA

The PTA cannot agree with the conclusions drawn by Siminn about the position of GR on the market because of alleged unlawful state support that the company is said to have enjoyed from its mother company, OR. Resolution of cases on unlawful state aid is a specific task within public administration and not within the remit of the PTA, but rather of the EFTA Surveillance Authority (ESA). One cannot see that it is consistent with methodology of market analysis, pursuant to the electronic communications legislation, to base conclusions on the market position of electronic communications companies on assessment of whether they have enjoyed alleged state aid in part or in whole. Should ESA come to the conclusion that there was unlawful state aid, then this means that the support will be recouped (clawback), indexed and with interest, i.e., a correction of a distorted competitive position in this respect, as this does not take place in implementation of market analysis, as one could understand that Siminn expects of the PTA.

Apart from the above, the PTA rejects that operations and development of GR electronic communications network were funded with unlawful state aid. It is simply not true that ESA came to such a decision. On the contrary, ESA rejected Siminn's complaint to the effect that GR had been funded with unlawful state aid, see Decision from 5 October 2011. In that decision, the matter adopted for resolution was whether the OR start-up contribution to GR in the years 1999-2001 had constituted unlawful state aid. One can thus say that the basis for

¹³ https://www.eftasurv.int/cms/sites/default/files/documents/decision-300-11-COL.pdf

GR operations had been examined in this case, and the PTA does not agree with Siminn that the conclusion had only related to limited aspects in company funding. The ESA conclusion was that GR funding was based on market and commercial terms and that it had therefore not constituted unlawful state aid.

Since the above specified decision was made, ESA has taken another complaint from Siminn against GR for resolution, dated 26 October 2016, to the effect that the company enjoyed unlawful state aid in its operations. In the investigation of this complaint, ESA decided to use as grounds that the PTA surveillance of financial separation of GR from other OR operations pursuant to article 36 of the Electronic Communications Act was an adequate guarantee for there not being unlawful state aid. That was the preliminary ESA conclusion, see letter dated 13 March 2018. On closer inspection of the case by ESA, it was however the conclusion of the institution, as recouping of unlawful gains by GR had not been completed, and the PTA did not have appropriate legal authority to apply such a measure - which ESA have, it was necessary to better examine whether individual breaches by GR of article 36 of the Electronic Communications Act, pursuant to specific decisions by the PTA, constituted unlawful state aid, see ESA Decision from 5 December 2019. 14 This case is still being reviewed by ESA. This ESA investigation is materially different from the complaints case, as it relates solely to estimated gain from specific breaches by GR of article 36 of the Electronic Communications Act, and not to the company's financial situation as a whole.

The PTA cannot see that the Siminn assertion is justified and as GR is a state-supported company, the conclusion of the PTA market analysis should be that GR is obliged to provide electronic communications companies with access to grey fibre. The PTA cannot impose obligations on a company that has not been designated as having SMP. If Siminn means that this would be the conclusion on the part of ESA, then this does not impact on this market analysis. In addition, ESA has not reached a final conclusion.

The PTA also totally rejects having presented false assertions about that case "to justify obligations on a wrong party". The PTA conclusion, after detailed analysis, is that Míla still enjoys - the only company - SMP on the relevant wholesale markets in this country. The PTA also reiterates that a final conclusion is not available from ESA. Should it be that these limited issues that the ESA is now examining vis-à-vis GR, constitute unlawful state aid to some degree, it remains to be seen what ESA plans to do in this connection. The PTA cannot guess about this conclusion.

10.2.2 Competition problems on the relevant market

Míla refers to paragraph 1156 in the PTA preliminary draft, where it is stated that in Section 8, the PTA had come to the conclusion that there was not effective competition on Market 3a and that Mila and in fact the Siminn Group had SMP on the market. Such a situation meant that Mila, which was part of the Siminn Group, thus had SMP on the market that enabled it

https://www.eftasurv.int/cms/sites/default/files/documents/gopro/5196-College%20Decision%20086-19-COL%20-%20State%20Aid%20-%20Iceland%20-%20Gagnaveita%20Reykjavikur%20-%20nonconfidential%20version.pdf

to prevent effective competition and to operate to a substantial extent without concern for competitors, customers and consumers.

Míla rejected the above specified conclusion of the PTA that Míla could hinder active competition on the market as totally unfounded and that it was not based in any way on real instances of such behaviour. Since the last analysis was made, competitors such as GR (38%) and Tengir (4%) had achieved a significant number of customers for their bitstream systems. To ignore this must be considered an unreasonable conclusion.

The position of the PTA

The PTA refers to discussion on Section 8 in the revised market analysis (Annex A) and to the same section here above with respect to market strength of the Siminn Group. This is very detailed discussion, which is argued in detail, so the PTA therefore rejects totally that this is an unfounded and unreasonable conclusion.

As has previously been stated, the PTA considers that effective competition has not appeared on the relevant markets, despite the fact that network operators other than Mila are operating in some areas of the country. The PTA considers that competition is not sufficient for it to be considered effective, but the existence of locally operating competitors is not ignored. This is taken into account by applying lighter obligations on those areas where there is more competition.

10.2.3 Vertical integration and transfer of SMP

Míla pointed out that in the preliminary assessment, it appears that the conditions appear to have been totally ignored that Míla and Siminn undertook with the CA Decision no. 6/2013, see Decision no. 6/2015 which is also intended to deal with comparable alleged problems arising from vertical integration of the companies and markets strength discussed by the PTA with respect to access to wholesale and to pricing.

The obligation had been imposed there on Siminn to conduct specific operations in basic operation of underlying electronic communications infrastructure, in a separate subsidiary, i.e. Míla, and specific obligations had been defined that aimed to ensure non-discrimination in business between Míla and Siminn competitors on the one hand and Míla and Siminn retail on the other. These decisions had been based on the Settlement between the CA and Siminn and Mila (and previously Skipti hf.). More precisely, in order to be able to compete on an electronic communications market (in retail) competitors required access to a greater or lesser degree to an underlying electronic communications system. This arrangement had created a persistent risk of barriers to competition and conflicts of interest, including that Siminn retail enjoyed better terms with respect to access to the underlying system than the competitors. A clear and definitive separation had been made with the Settlement, between on the one hand the underlying systems of the Group and service with electronic communications companies related to these underlying systems, and on the other hand the Siminn retail operations, and it was endeavoured to ensure that Siminn and its competitors were on a level playing field when it came to access to underlying electronic communications systems and purchase of electronic communications service at wholesale level.

With the subsequent merging of Skipti hf. and Siminn, changes have taken place in the Group, such that instead of Siminn and Míla being sister companies under the parent company Skipti, Míla became a subsidiary of Siminn. For this reason, it had been considered necessary to make amendments to Decision no. 6/2013, see Decision no. 6/2015. Independence of the Míla board vis-à-vis Siminn had been strengthened. Míla board members thus had to be independent of Siminn and related companies. It was however authorised that a minority of the independent Míla board members continued to sit on the board of Siminn, but their participation in the tasks of the Míla board were governed by strict rules. A requirement for full separation in premises had been made, within a specific adaptation period, and Míla's authorisation to seek support service from the parent company was more limited than in the prior Settlement. The independence of monitoring committees for parity of access to the companies' electronic systems had also been strengthened.

With reference to the above specified Settlement, and the conditions that Mila and Siminn have accepted vis-à-vis the CA, Mila cannot see otherwise than that at least part of the competition issues at wholesale level that are of concern to the PTA, have already been solved. In other words, the "Siminn Group" could not leverage its alleged market strength at wholesale level which otherwise could have been inherent in the companies' vertical integration, because of the previously named Settlement between the companies and the CA.

In connection with the above, there is nothing established about Míla having breached the Settlement in question. On the contrary, one could take as given that this was not the case. Apart from that, one could not see that the PTA had taken a specific position on whether competition law was adequate to ensure the interests that were at risk.

The position of the PTA

The PTA would like to begin by noting that as Markets 3a and 3b are in the ESA recommendation on the relevant markets from 2016, an assessment has already been made on whether competition rules on their own suffice to engender efficient competition. The conclusion of the EU Commission and of ESA is to the effect that the relevant markets generally fulfil all conditions for it to be deemed that there is a need to apply specific obligations pursuant to electronic communications legislation to support increased competition. No issue has been identified that can create a special position for these markets in this country such that this does not apply to them.

It is not correct that the PTA does not take into account the Siminn Group Settlement in the market analysis, as it is discussed at many places in the analysis. As explained in the Section on competition problems, settlements between the Group and the CA and obligations in force pursuant to a decision by the PTA from 2014 on current market analyses on the relevant wholesale markets, have not prevented all of the behaviour of the Group that inhibits competition. When the PTA assesses whether there is a need to apply obligations, the Administration, assesses how the situation could become if PTA obligations did not apply.

One can note that competitors of the Siminn Group have regularly complained to the CA, from the time that the Settlement was initially made in 2013 and accused the Group of having breached the Settlement with various kinds of behaviour. With the CA Decision no. 25/2020, dated 28 May last year, the Authority came among other things to the conclusion that Siminn had breached two further specified provisions of the Settlement and one provision that relates

to a ban on specific bundling in another Settlement that the Siminn Group made with the CA on 15 April 2015, and in addition to this, the CA is processing more complaints that relate to alleged breaches of the above specified Settlement.

With the Ruling no. 1/2020, dated 13 January 2001, the Appellate Committee for competition issues confirmed that Siminn had breached article 3 of the Settlement from 15 April 2015. In the article in question, it is stated:

"Siminn is unauthorised to make it a condition for purchase of electronic communications services offered by the company that some Skjárinn service pursuant to this Settlement shall be included in the purchase. In addition to this, Siminn is unauthorised to bundle for sale, the company's electronic communications services and Skjárinn service at a price or on such terms that would be equivalent to the above condition."

The Committee confirmed with its ruling that Siminn had, with its sales and marketing of the TV channel Síminn Sport (English football) through Siminn Heimilispakki (Home Package), breached the conditions of article 3 in the Settlement in question. In the opinion of the committee, Siminn had used its position to enable that its customers in one department purchased or received its service in another department, for a price or terms of business that one might equate to a condition to purchase the service items jointly. With this Siminn marketing, i.e., making Siminn Sport a part of Heimilispakkinn (Home Package) through the Sjónvarp Símans Premium content provider, and in parallel, slightly increasing the price of Heimilispakkinn, one must deem that Siminn had specifically endeavoured to have that group of customers that had purchased electronic communications and TV service through the above-mentioned service option, to furthermore purchase access to a TV channel in the same manner.

The committee considered the breach to be serious, and that Siminn's behaviour had been contrary to the provisions of the Settlement that the Siminn Group had itself undertaken to respect in its operations. In this respect one had to keep in mind how important it was to comply with the conditions of settlements and to support that their objectives were achieved. Siminn could furthermore not have been in doubt as to whether the company's marketing of the TV channel Siminn Sport might breach the provisions of the Settlement.

As stated above, the CA considered in its above specified decision, that Siminn had also breached two further specified provisions in the Settlement that the Siminn Group made with the CA in 2013 and which was revised in 2015. More specifically, article 19, which prescribes that Siminn and Mila shall ensure that varying service items are adequately separated in company operations, including in price, and article 20, which prescribes, among other things that Siminn shall continue to ensure that the company's agreements with customers on the home market shall not include a longer contractual duration than one month and that if the customer decides to move his custom to another electronic communications company, Siminn and Mila shall ensure that the service transfer does not impact on other terms of business of the customer with Siminn.

The Appellate Committee agreed with the CA that there were various indications that Siminn had also breached the provisions in question, but nevertheless dismissed those items and referred them for new processing by the CA. There, the Committee referred among other things to the purpose of the provisions being among other things to prevent Siminn and Míla from applying bundling on those markets where they had a dominant market position in each

instance. This must be understood in such a way that there had to be an established assessment of whether the company in question had a dominant market position on the markets in question. It should not be deemed that in the case there was an established adequate investigation by the CA of the defined markets of the case, nor whether Siminn had a dominant position on them. One therefore had to consider that this part of the case was not fully resolved.

The Appellate Committee reduced the fine that the CA had imposed on Siminn from ISK 500,000,000 to ISK 200,000,000.

The CA is now processing more cases that relate to alleged breaches of the ban provisions of the competition legislation and to alleged breaches of the Settlement in question and will conduct analysis and assessment of whether Siminn is still in a dominant position on the relevant markets. It should then come to light whether Siminn has such a position such that the alleged breach in question is deemed proven. The CA has at least agreed with the PTA assessment presented in the market analysis here under discussion, that Siminn has in all likelihood a dominant market position on the retail market for Internet connections, as is stated in the comments of that Authority in the consultation that the PTA opened during the period of processing the analysis.

Settlements between the Siminn Group and the CA do not cover all issues covered by obligations elaborated by the PTA, and it is the PTA assessment that obligations pursuant to electronic communications legislation should apply on the relevant markets in addition to the obligations undertaken in the Settlement.

In order to explain this issue further, the PTA will make an addition to the section in the market analysis where there is a detailed explanation of the duties pursuant to the Settlement in force, particularly those that are presented in the CA Decision 6/2015, such that they will be compared with the obligations that the PTA plans to impose or maintain.

Míla refers to paragraph 1161 where it is stated that a company which had SMP on the wholesale market could tend to deny companies that are competing with the company on downstream markets, access to wholesale service, for the purpose of preventing competition or at least making it more difficult for competitors. Such behaviour could be manifested in absolute refusal of access or that access was provided at such unreasonable terms, including pricing, that was tantamount to refusal. The PTA considered that Míla could have had opportunities and incentives to deny Siminn competitors' access to Market 3a in order to make it difficult for them in competition on downstream markets, if no obligations were in place that obliged the company to provide access.

Míla said that there was no reason for Míla to deny access to electronic communications companies to Market 3a. Electronic communications companies had another option and would choose that. This was also ensured with obligations in the CA Settlement.

The position of the PTA

The PTA does not agree with this Míla assessment. It is generally considered that vertically integrated companies can tend to deny competitors access to wholesale procurements. With respect to the Míla position, one must keep in mind that at many locations in the country there

are no other options than Míla wholesale service. Even in those areas where another access network is in place, it is not at all certain that competition is effective at wholesale level, where there is oligopoly. Other companies that have not been designated as having SMP are not obliged to provide access to Market 3a and Míla's largest competitor, i.e., GR generally does not provide access to local loops on Market 3a but offers its customers access to bitstream service on Market 3b. This means that companies that wish to operate their own bitstream service have in many instances no other option than the Míla network.

With respect to obligations in the Settlement with the CA, reference is made to the answer to Míla comments preceding the above.

Míla refers to paragraph 1162 where it is stated that for denial of access to create significant competition problems, circumstances must generally exist where competitors on downstream markets did not have the option of using other networks that could provide them with comparable access at comparable terms. Despite the fact that in this country, fibre-optic networks had been deployed by parties other than Míla, they do not have national coverage and at many locations retailers had to rely on Míla wholesale service. One also had to keep in mind that there were still just over 40% of Internet connections in this country that were on the copper network, which were only available from Míla. Míla had also taken over operations or purchased many of the local fibre-optic networks that had been deployed in the countryside with grants from the Telecommunications Fund. Míla refusal of access to connections on Market 3a could thus have serious consequences for competition on downstream markets, particularly if the operational basis of competitors on the market in question was not secure as a result of market structure and/or of behaviour of the Siminn Group.

Míla said that it was not necessary that the network had "national coverage", as this should relate to consumers at each location, and in various areas there was a choice of two network operators. It was of no concern to consumers whether Míla offered service across the whole country or not. Users just had their own connection at one location, and it did not matter whether the party offering them service was offering service at more locations, and it was widely the case that networks were local.

Here the PTA is furthermore using old statistics, i.e., the correct figure was about 35% Internet connections in Iceland were over copper. This figure had dropped from 100%, from about 10-13 years ago. This development would likely continue throughout the lifetime of the analysis and Internet connections over copper would be very few after about 5 years if this development continued.

Then, only about 20% of Internet connections did not have the option of fibre-optic today, which would be about 10% after 1-2 years if the development plans of Míla competitors were realised. With competitive pressure from substitute products like 5G, there would be no possibility for Míla to price these connections without taking the market into consideration. There was also the fact that Míla was a wholesale company that had its revenue from electronic communications companies and already had substantial obligations from the competition authorities to provide access to its systems on the basis of parity. It therefore had no impact, if the PTA were to impose all obligations on the companies, such as single price for copper and fibre-optic.

The position of the PTA

The PTA has here above answered the comment relating to paragraph 1162 in the preliminary draft and refers to that.

The PTA does not agree that the paragraph in question concerns consumers directly, as it relates to the description of a competition problem that relates to potential denial by Mila of wholesale access to the relevant wholesale market. A similar paragraph can be found in Section 11 in the preliminary draft related to Market 3b.

In the paragraph in question, it is stated that over 40% of internet connections were still over copper in this country, but Mila says that they are 35%. The truth is that about 36% Internet connections were over copper at the end of 2020, but the PTA used end of year 2019, which were the newest available figures when the preliminary draft was opened for consultation at the end of April 2020. The PTA will revise the numbers in the paragraph in question. A number of things indicate that this development has slowed down in recent months and the PTA expects that at the end of 2023, there will still be a significant proportion of Internet connections over copper, as explained in Section 3 of the updated initial draft (Appendix A), but it is clear that connections over fibre-optic will continue to increase during the lifetime of the analysis. The PTA reminds that in recent years, Mila has been responsible for rapid and substantial fibre-optic rollout, and data from electronic communications companies shows that Mila will be responsible for most of the rollout during the lifetime of the analysis and that there will be significant shrinking of the difference in distribution proportion of Mila fibre-optic network on the one hand and the fibre-optic networks of the company's competitors on the other hand, during the lifetime of the analysis.

Míla states that only about 20% of homes and companies in the country did not have the option of Internet connections over fibre-optic in the summer of 2020, and that this proportion would be at about 10% in 1-2 years if the distribution plans of Míla competitors were realised. A correct statement is that 83% of homes and companies had the option of an Internet connection over fibre-optic at end of year 2020. The PTA has furthermore here above, mentioned that the fibre-optic development plans of competitors of Míla were overestimated in the information that the PTA applied in its preliminary analysis. The PTA therefore does not expect this proportion to have reached 10% before around the end of a lifetime of the analysis, which is planned as end of year 2023. The PTA reminds once again that Míla will be responsible for most of the rollout during the period.

In Sections 3 and 4 in the revised preliminary draft (Appendix A) and in the same sections here above, the PTA has provided detailed arguments for this position that 5G is not a substitute product for copper and fibre-optic on the relevant wholesale markets, and nor will it in all likelihood be during the lifetime of the analysis. Reference is made to this.

The PTA has furthermore provided detailed arguments in Sections 8 and 9 in the revised preliminary analysis (Appendix A) and in the same sections here above, that Míla still has SMP on the relevant wholesale markets and could thus behave to a significant degree without needing to have consideration of its competitors, if there were no appropriate obligations in place. Reference is made to this.

Míla finally states that it would have no impact, if the PTA did not impose all the obligations on Míla, such as single price on the company's copper and fibre-optic. The PTA considers there to still be a need to prescribe cost-oriented tariff for Míla copper local loops, but reminds that the Administration, subsequent to additional consultation in the autumn of 2020, decided not to impose such an obligation on the company's fibre-optic network and instead to prescribe an ERT obligation on the Siminn Group.

Míla refers to paragraph 1163 where it is stated that transfer of market power through pricing can have a variety of manifestations, such as discrimination by pricing, cross subsidies and predatory pricing. The purpose of such behaviour could be to increase costs for competitors, lower their turnover and put them in a tight position by having a very small difference between the price on the relevant wholesale market on the one hand and on downstream markets on the other.

Míla said that this appeared not to be the situation in this country. For example, electronic communications companies appeared to offer the service at the same price across the whole country.

The position of the PTA

In this paragraph, the PTA is describing potential behaviour of a party with market dominance where obligations are not in place. With respect to discriminatory pricing, reference is being made to the dominant party discriminating against his customers in price in such a manner that related companies or its own departments, enjoy more advantageous wholesale terms than external parties. Reference is not being made here to the question of whether electronic communications companies choose to offer varying retail prices in urban areas or rural areas, but it is correct when Míla says that the reality is that electronic communications companies offer the service at the same price across the whole country, which precisely supports the conclusion of the PTA that in this country there is one geographic market.

Míla refers to paragraph 1164 where it was stated that the company with SMP could have the incentive to sell its wholesale service at varying prices, depending on who the customer was. The company could for example, sell to its own retail branch at a lower price than to other competitors. This could lead to costs being higher for competitors and could make it difficult for them to compete. This could lead to there being too small a difference between wholesale and retail prices which could make it impossible for competitors to conduct their operations at a profit and could eventually drive them out of the market.

Míla said that the Settlement dealt with this, vis-à-vis Siminn and Míla. In addition to this, the obligations on Míla were to provide the same service at the same price. GR should have the same obligations, but the company had an unofficial tariff and could therefore discriminate between its customers despite having over 60% market share in Reykjavik and Seltjarnarnes, where about 40% of inhabitants lived, and probably about 50% in the Capital City Area, where about 65% of the country's inhabitants lived.

The position of the PTA

In this paragraph, the PTA is describing potential behaviour of a party with market dominance where obligations are not in place. As has been previously stated, it is the conclusion of the PTA that Míla has SMP on this market and among other things because of these issues, obligations have been imposed on Míla that the PTA intends mostly to maintain. It has also previously been stated that it is not the conclusion of the PTA that GR has SMP on this market, and for that reason, obligations are not imposed on that company.

Here in Section 10.2, the PTA has provided arguments for why the Settlement in question between the Siminn Group and the CA could not lead to Míla no longer being considered to have SMP on the relevant wholesale markets and to obligations on Míla being unnecessary. In addition, it can be mentioned that the PTA has no guarantee as to how long the Settlement in question will apply, but the Siminn Group has sought hard in recent years to have it deleted or changed.

Míla furthermore overestimates the GR market share, whether in Reykjavik or in the whole Capital City Area. The correct figures are that the GR market share was [...]% in the Capital City Area at end of year 2020 and [...]% in GR's operational territory on the relevant market. It would be more appropriate to use the GR market share in the whole of the company's operational territory. The PTA reminds however that the conclusion of the Administration was that there was no reason to segment geographic markets in this country, but rather to prescribe differing obligations.

Míla referred to paragraph 1165, where it was stated that differing prices could in some instances be justifiable, such as if the cost of providing the service was verifiably varied, or if a bulk purchase discount was being given. If a bulk purchase discount was however based on the number of transactions that could only apply to the retail branch of the company itself, then this indicated that this was a measure to inhibit competition. The PTA considered that if appropriate obligations were not applied then Míla would have the opportunity and incentive to discriminate between competitors in pricing on downstream markets.

Míla pointed out that GR was discriminating between its customers in pricing, for example with discount agreements, binding agreements and unofficial tariff.

The position of the PTA

The PTA points out that no obligations rest on GR for non-discrimination and/or transparency, as the Administration is only authorised to impose such obligations on a company subsequent to market analysis where the conclusion is that the company has SMP on the relevant market. In addition to this, GR is not a vertically integrated company like the Siminn Group, which offers various electronic communications service in retail. The PTA is not aware that discounts or other elements in GR tariff support one electronic communications company rather than another receiving better terms in the case of the same type of transaction.

Tengir also referred to the above specified paragraph 1165. Tengir emphasised the importance of this paragraph, i.e., that there were indications that the Siminn Group kept

prices down or even practised subsidies/under-pricing on Markets 3a and 3b and thus significantly impaired the competitive grounds of independent network operators.

The position of the PTA

The discussion in the paragraph in question is in general about how a company with SMP can leverage vertical integration. With respect to potential under-pricing, the PTA refers to an answer to comments in Section 10.2.5 here below.

Nova referred to Section 10.2.3.2, which discusses pricing, and was a subsection of 10.2.3 which discussed vertical integration and the transfer of market power. In the opinion of Nova, there was a great danger of there being cross subsidies on the market in various forms. It was for example amazing how eager Siminn was to make free offers for many months, and how much higher Siminn's markup appeared to be (and needed to be) for access charge (where the service will always be purchased from Míla) compared with others, which for example purchased access service from GR or Tengir. GR and Tengir, in most instances offered considerably higher wholesale price, but nevertheless, the Siminn retail price was almost always highest in comparison with others.

The position of the PTA

As has previously been stated, the PTA decided to retract the obligation for cost analysed wholesale tariff for fibre-optic local loops and bitstream service based on fibre-optic local loops and to impose instead, an ERT obligation on the Siminn Group, for service based on fibre-optic local loops. The PTA considers that the ERT obligation will ensure that there will not be margin squeeze between wholesale prices of fibre-optic service from Míla and Siminn retail service which is based on fibre-optic local loops. Such an obligation should be advantageous for electronic communications companies competing with Siminn in retail and should level the position of the companies on this market. This will be further argued in Appendix C, and in the revised analysis (Appendix A).

Siminn markup on Míla access charge (Siminn line charge) is now being examined by the CA and the conclusion is awaited in this case. The Administration is furthermore, processing a case that relates to the Siminn free offer of Heimilispakkinn (Home Package) and Sjónvarp Símans Premium.

Míla referred to paragraph 1174 where it was stated that problems related to communicating information between companies could in the first instance be such that the wholesale part of a vertically integrated company provided its retail departments with better information and earlier than it did when competitors were informed, e.g. about development plans and upgrades of technical equipment. This could lead to competitors becoming slow to react to changes and to miss opportunities to gain or retain customers that were interested in purchasing the newest service solutions on the market. A vertically integrated company's treatment of information from customers could furthermore create competition problems. When making wholesale agreements, the wholesaler received various information concerning the operations of the wholesale purchaser, its plans and estimates of the number of users. A

vertically integrated company could have an incentive to disseminate such information in some way to its retail departments, which then make it easier for them to resist competition.

Mila pointed out that the Siminn Group Settlement with the CA prevented this.

The position of the PTA

The paragraph in question is in a general section in the preliminary draft which describes competition problems that may arise if there were no obligations in place on a party with SMP. Here above, the PTA has provided arguments for why the Administration considers that the Settlement in question between the Siminn Group and the CA does not suffice to prevent potential competition problems. The PTA has no guarantee that this Settlement will be in force or not be amended during the lifetime of the analysis, as the Siminn Group has repeatedly tried to have the Settlement cancelled or amended.

10.2.4 Problems related to assessment of SMP on the relevant market

Tengir refers to paragraph 1180 where it is stated that a company with SMP can endeavour to make it difficult for those companies that operated in competition with that company on the relevant wholesale market and downstream wholesale markets, for example on Market 3b and Market 4, or even drive them off the market. If appropriate obligations were not in place, there was a risk that such a company could for example arrange its pricing in the short-term, such that other operating companies would find it difficult to compete, so retailers on downstream retail markets would move their business over to the system of the SMP operator. In such a way, such an SMP operator could, among other things, collect normal profit at the retail level in order to subsidise service on the relevant market and/or downstream wholesale markets. It was clear that parties like GR and Tengir did not have the same certainty that service providers would not transfer their business to the Míla network as Míla had certainty that Siminn, which is the country's largest retailer, would not transfer its business to GR and/or Tengir. This means that possible predatory pricing by Mila on the relevant market, which the parties in question found it difficult or impossible to compete with, could create serious competition problems on electronic communications markets. Countervailing buying power of service providers against GR and Tengir is thus much greater than the Siminn countervailing buying power against Míla because of high vertical integration of the Siminn Group.

Tengir emphasised the importance of this paragraph, as there were indications that the Siminn Group kept prices down or even practised subsidies/predatory pricing on Markets 3a and 3b and thus significantly impaired the competitive grounds of independent network operators.

The position of the PTA

The PTA refers to discussion on under-pricing in its answer to the next comment here below. It can be to the advantage of a party with SMP, such as the Siminn Group to predatory price a specific service temporarily, in order to augment or maintain its position when such a party has the opportunity to recoup predatory pricing in the light of this position as a vertically integrated company. The PTA has however not cost analysed this Mila service item, and for

this reason the PTA cannot state with adequate certainty whether there is predatory pricing or not.

10.2.5 Further on competition problems related to Market 3a in this country

Tengir referred to paragraph 1187, where it was stated that since the last analysis was published in 2014, GR had increased its investments in fibre-optic network. This development by GR had however not resulted in Siminn and Míla having felt obliged to reduce their retail prices in the GR operational territory. There were indications that the Siminn Group kept prices low, or sometimes even subsidised on the relevant market and on the wholesale Market 3b with high markup and thus profit on the line charge at retail level in connection with household connections and with a certain behaviour in connection with corporate connections, and thus significantly constrained the competitive grounds for independent network operators such as GR and Tengir. GR and Tengir were not vertically integrated companies and therefore had no option for answering such behaviour by the Siminn Group.

Tengir then referred to paragraph 1224, where it was stated that Tengir agreed with the GR views in all main respects, and considered that the Siminn gross profit from the line charge was unreasonably high and the question was whether the Siminn Group was using its size and inhibiting growth or delaying Tengir growth in the Tengir operational territory with abnormally low Míla wholesale prices and was thus able to embark on civil works e.g. in Akureyri, without there being market grounds for such.

Tengir furthermore referred to paragraph 1232, where it was stated that the PTA considered it not inconceivable that the Siminn line charge had increased in recent years and had at least partly been used to support extensive and costly Míla fibre-optic development. It was clear that the Siminn Group benefited from having the possibility of using its vertical integration in a manner that other electronic communications companies in this country did not have at their disposal. In addition to this, such an incentive did exist, though it would not be decided here whether such abuse had taken place. Cross subsidies in pricing between wholesale and retail were among the risk factors for competition under such circumstances.

Tengir emphasised the importance of this paragraph, i.e., that there were indications that the Siminn Group kept prices low or even practised subsidies and/under-pricing on Markets 3a and 3b and thus significantly impaired the competitive grounds of independent network operators.

The position of the PTA

The PTA stands by the discussion in the above specified paragraphs 1187, 1224 and 1232 in the preliminary draft.

The PTA refers to its discussion on the Míla wholesale prices with respect to comments on paragraph 537 in Section 6.5.5 here above, where a table is presented that shows changes in Míla prices from August 2013 for access to fibre-optic local loop and to Access Option 1. In order to examine the development of Míla prices for its fibre-optic service, the PTA considers it appropriate to examine prices to electronic communications companies when a fibre-optic local loop is delivered in Access Option 1. Because of the Míla GPON topology, the

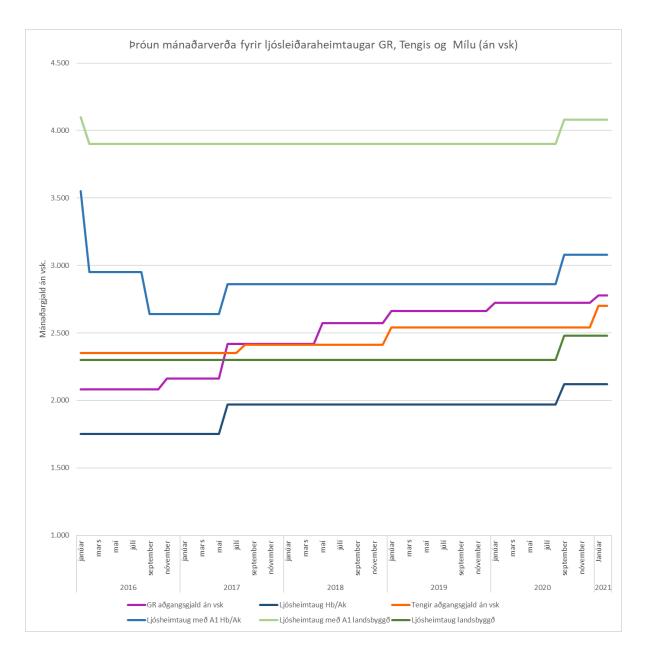
company's fibre-optic local loops are in the great majority of cases delivered to electronic communications companies in Access Option 1, but only [...]¹⁵ Míla fibre-optic local loops are sold without bitstream, or an absolutely negligible proportion.

It catches the attention of the PTA that there was no increase in this service from Míla from 1 June 2017 until 1 September 2020 - for more than 3 years. One can mention in this connection that organised Míla fibre-optic rollout did not commence to any significant degree prior to 2016, and it was not until the first part of 2017 that Míla leased fibre-optic local loops exceeded [...], and they had reached about [...] in end of 2020 and are thus increasing rapidly. The increase in the Míla monthly charge for fibre-optic local loops with Access Option 1 during the period 1 June 2017 until 1 September 2020, was 7.7% in the Capital City Area and Akureyri and was 4.6% in the countryside. At the same time the consumer price index increased by approximately 12.5%. If one examines that period, one can see that the Míla price for access to fibre-optic with bitstream delivered in Access Option 1, is not increasing in step with index increases which means that this is a reduction in real terms.

The prices of GR and Tengir have increased more during this period than the Míla prices, as can be seen in the following figure which shows the monthly price for fibre-optic local loops from Tengir, GR and Míla. The picture also shows the Míla prices for fibre-optic local loop with Access Option 1 and the GR price for Internet that is collected from electronic communication companies has [...]

⁻

¹⁵ Based on information from Míla in December 2020.



This Míla pricing policy indicates predatory pricing by the company and GR and Tengir have pointed out that this could be the case, and these companies are very aware of costs for fibre-optic network deployment. The PTA has however not cost analysed this Míla service item, and for this reason the PTA cannot state with adequate certainty whether there is predatory pricing or not. It could be advantageous for the Siminn Group to predatory price a specific service temporarily in order to improve its competitive position even further, in the light of the company's fast-growing fibre-optic distribution. The Group has the opportunity to recoup such potential predatory pricing, as many indicators suggest that the Siminn Group does, with higher Siminn markup on line charge, in the light of its position as a vertically integrated company.

In the PTA preliminary draft, it is stated that the price difference between the Siminn line charge and the wholesale price of local loop access had often proven to be substantial in recent years. It is furthermore clear that the Siminn markup on wholesale price of copper local loops with a line charge in recent years is in the order of and up to over 100%, but markup was

rather less in the case of fibre-optic local loops but nevertheless generous. A difference in wholesale prices is thus not reflected in the retail prices of electronic communication companies by area. Given the wholesale and retail prices within the Siminn Group and the number of users, one could roughly estimate that the Siminn markup on line charge amounted to ISK billions during recent years.

In comments by the CA in the additional consultation opened by the PTA on 30 October 2020, dated last 27 November, it was stated among other things that the CA agreed with the PTA conclusion with respect to generous markup on the Siminn line charge and the positive performance of line charge. As is stated in the PTA preliminary analysis, an investigation is being conducted by the CA on Siminn markup and collection of line charges for resale of local loops, subsequent to complaints from GR. The Administration had collected detailed information and data from Siminn for the investigation. According to submitted financial information, Siminn profit from line charge pre-tax was ISK [...] in 2015, ISK [...] in 2016, ISK [...] in 2017, ISK [...] in 2018 and ISK [...] in 2019, a total positive performance that amounted to ISK [...]. Markup on the Siminn line charge had been in the range of [...]%, but [...].

It was stated in the above specified CA comments that although a line charge was an unavoidable part of an end-user having an active connection, see PTA preliminary draft, and although to some extent there was discussion on price development of access charges in the PTA market analysis, the above specified factors indicate that the access charge no longer had the single purpose or main purpose of covering the wholesale cost of the access network that was the basis for Internet service. One also could point out that there is nothing in the environment of retail electronic communications service that directly demands that a separate line charge be collected. Retailers of electronic communications service could well gather costs incurred for procuring the service, local loop lease and bitstream access, and collect this within the retail price for services. This was done by Siminn and all other parties on the market for a long time. By making line charge a separate charged item in retail, part of this cost is removed from the whole, making it possible to reduce the advertised price for the service provided over the line. The purpose and nature of the line charge can be deemed unclear in the mind of consumers, and electronic communications companies have found it easy to increase it little by little, and not increase or less often, and by smaller amount, the advertised price of Internet service and home telephone.

It was furthermore stated in the above specified CA comment, that it was said in the PTA consultation document that the Administration did not have proof that pricing was lower than cost, and that cases that related to damaging predatory pricing were rather in the remit of the CA. The Administration pointed out that if wholesale prices on the relevant market were possibly lower than cost, then the PTA needed to take this into account in its market analysis and in imposed obligations on the relevant markets, because against this there appeared to be market failure as a result of the line charge in question on the retail market, where the pricing of line charge might be excessive. The Administration noted in this connection, that though alleged under-pricing had only been one of a number of reasons for the need for imposition of price obligations on Míla fibre-optic, the PTA did not need to demonstrate damaging under-pricing to be able to impose surveillance obligations with cost analysed wholesale

prices on the basis of article 32 of the Electronic Communications Act. It suffices that the PTA market analysis indicated that a lack of active competition resulted in the relevant company demanding excessively high charges or that there was an abnormally small difference in wholesale and retail prices.

The Administration finally stated that it was true that the CA could initiate an investigation on the alleged damaging under-pricing by Míla in the light of the ban rules of competition legislation, but the Authority could not see what impact that would have on the PTA market analysis and potential surveillance obligation for cost analysed wholesale tariff. Although market analysis of the Electronic Communications Act and of European competition legislation had specific connections, the force of paragraph 1 of article 32 of the Electronic Communications Act differs from the force of article 11 of the Competition Act regarding a ban on abuse of a dominant market position. In other words, should lack of competition, and the capacity or incentives and prior behaviour of a company with SMP give reason to impose a surveillance obligation on the basis of article 32 of the electronic Communications act with a cost analysed wholesale tariff, the same conditions or behaviour could at the same time be lawful in the understanding of article 11 of the Competition Act.

The PTA will reply to the above specified CA comments and others in more detail in Appendix C, which discusses the above specified additional consultation. In the opinion of the PTA, the above specified CA discussion does however support the PTA conclusion that there is a need to apply intervention in the form of obligations by the PTA because of the Siminn Group pricing. As stated in the CA discussion, Siminn performance from the line charge was positive by ISK [...] billion in the years 2015-2019, and one could estimate that it was ISK [...] billion if one added the year 2020. These are substantial sums of money that it is clear that competitors of the Siminn Group can either not enjoy or at least to a much smaller degree, because they are not vertically integrated in this respect. The PTA is furthermore, in agreement with the CA description of the interaction between article 32 of the Electronic Communications Act and article 11 of the Competition Act, as stated in the CA discussion here above.

One may finally note that the PTA decided, subsequent to consultation on the preliminary draft, to retract the obligation for cost oriented Míla tariff for fibre-optic and to prescribe instead an ERT obligation for reasons explained earlier in this document and which will be further explained here later in discussion on comments that relate to an obligation for price control. Reference is also made to the additional consultation opened by the PTA on 30 October 2020, with respect to arguments for this change in the Administration's plans, and in Appendix C, which discusses the conclusions from that consultation. The PTA has therefore reviewed its position with respect to an obligation for cost analysed prices for access to Míla fibre-optic local loops. The PTA considers that the ERT obligation in question should be an adequate intervention in the Siminn Group pricing, at least throughout the period of validity of this analysis. Obligations to provide access, for non-discrimination and transparency still apply to Míla, with respect to fibre-optic local loops.

Tengir confirmed the behaviour described in paragraphs 1200-1205 and that it had made it more difficult for Tengir to gain a foothold on Market 3a in Húsavík. No changes have taken

place to the arrangement there, despite regular requests from Tengir and Siminn customers in Húsavík on this matter.

The position of the PTA

The PTA considers that the above specified comments from Tengir confirm the discussion presented in paragraphs 1200-1205 in the preliminary draft. Siminn and Tengir had for example not yet come to an agreement on the entry of Siminn into the Tengir fibre-optic network with Siminn purchase of bitstream access with Tengir, in the same way that Siminn and GR agreed in July 2020 and which was expected to be realised in the latter half of 2021. Tengir has for some considerable time requested such transactions with Siminn, but up to this point in time Siminn has not purchased bitstream access from anyone other than Míla.

Nova referred to paragraphs 1185-1189 in Section 10.2.5.1 and indicated the very detailed discussion on bundles and on the position on other markets that was described in the Competition Authority Decision no. 25/2020, where the very strong position of the Siminn Group was explained in detail.

The position of the PTA

The PTA agrees with Nova that very detailed discussion on bundling by the Siminn Group through Siminn's Heimilispakki (Home Package) can be found in the above specified CA decision.

With the decision of the Competition Appellate Committee no. 1/2020, dated 13 January 2021, it was confirmed that Siminn had applied unlawful bundling in connection with the sale and marketing of the TV channel Siminn Sport (English football) through the Heimilispakkinn (Home Package) in question and thus breached article 3 of the Settlement made by the Siminn Group with the CA on 15 April 2015, in connection with the merging of the TV station Skjárinn and Siminn, where up to this point in time Skjárinn had been a subsidiary in 100% ownership of Siminn. The provision in question of the Settlement was intended to prevent Siminn making it a condition for purchase of electronic communications service that a specified TV service was included in such a purchase or price or terms of business or were such that one could equate them to this condition.

In this way, in the opinion of the Appellate Committee, Siminn had used its position to enable its customers in one department to purchase or receive its service in another department, for a price or terms of business that one might equate to such a condition to purchase the service items jointly. With this Siminn marketing, i.e., making Siminn Sport a part of Heimilispakkinn (Home Package) through the Sjónvarp Símans Premium content provider, and in parallel, slightly increasing the price of Heimilispakkinn, one must deem that Siminn had specifically endeavoured to have that group of customers its customers that had purchased electronic communications and TV service through the above-mentioned service option, to furthermore purchase access to a TV channel in the same manner.

The PTA referred, in other respects to the resolutions of the CA and of the Appellate Committee. In the opinion of the PTA, this is one more example of behaviour of the Siminn Group throughout the years, which is intended to limit competition on electronic

communications markets. This behaviour has doubtless also had an impact on competition between Mila and GR, as Siminn has not up to this point in time offered its service over the GR network, except since August 2018 with an OTT solution, which has not been very popular with consumers.

Nova referred to paragraph 1192-1193 in Section 10.2.5.2 in the preliminary draft, which discusses the impact of the strong Míla position on the operations of smaller local networks Nova stated that Míla was doubtless capable of operating those networks that had been developed by smaller parties. It was however amazing how non-transparent the process was, i.e. handing over for operation and/or selling to Míla the infrastructure that these parties had developed. It seems to be that a call for tender process or something similar was not needed for the networks to be handed over to Míla for the long term. The silence in which this "transfer" took place was remarkable. For the long term, it cannot be positive for competition if almost all infrastructures end up in operation or ownership of one and the same party.

It was clear that the Míla network with national coverage would be among the infrastructures that made Míla's position unique when the purchase and future operation of such networks were calculated for profitability. It was very important that access of other parties to for example the NATO cable, could be in such a manner that it would be possible to compete with Míla/Siminn at more locations in the country. This was a basic prerequisite for potential competition from other parties.

The position of the PTA

The Nova comment supports the PTA conclusion with respect to Míla's strength on the relevant markets and the advantages of having the most widespread network. The PTA precisely explains in its analysis that Míla has been rolling out against government subsidies, purchasing or ensuring long term control over many such countryside networks that have been deployed with state aid. The PTA is aware that the NATO cable is an important factor in being able to offer service across the whole country. It is not however the task of this analysis to intervene in access to the cable, as this belongs to analysis of the market for trunk line lease (Market 14/2004), which the PTA began to process in 2020, and intended to complete in 2022.

Siminn emphasised that all of the Siminn TV service was already on offer over all systems in the country, whether this was over a fixed line or mobile phone system. Customers on systems of GR, Tengir or Snerpa could thus purchase Siminn TV service, pay the basic charge and add any service whatever. The conclusion of the District Court in the case for rescinding the PTA Decision no. 10/2018 had constituted rescinding in those issues which the PTA defined as the Vodafone involvement in the case and the judge concluded that the PTA had not had legal authority to deem that Siminn had committed an infringement against Vodafone. The District Court had however considered that Siminn had committed an infringement against GR. It was however clear that there was no impact of the case on GR operations, as the company had raised its share to over 50% during the period of the investigation. It was undisputed that the quality of Siminn service, which was distributed over the Internet was adequate. Siminn emphasised that the Siminn TV service was not electronic communications service. All of the grounds that the PTA adopted with regards to the alleged problems related

to Siminn TV service were thus of a historical nature, whereas the PTA should be forward-looking.

The position of the PTA

The PTA refers to the detailed answer here above in Section 10 with respect to judgement of the District Court of Reykjavík from last 1 July. Reference is made to this. The PTA will revise Section 10.2.5.5 in the preliminary draft (Appendix A) with respect to this judgement and other issues that have transpired subsequent to the preliminary draft having been submitted for consultation on 30 April 2020.

Siminn refers to the Siminn TV service being on offer over all fixed line and mobile phone systems in the country. The PTA points out that this was not the case from October 2015 until August 2018, when Siminn first began to offer the non-linear TV service over an OTT solution. The PTA furthermore points out that uptake of the Siminn OTT system in question had been [...]. It was probably very important in this respect that Siminn offered a popular and attractive bundle, Heimilispakkinn (Home Package), where various electronic communications services and TV service were bundled together. The PTA reiterates that the District Court came to the decision that Siminn had breached paragraph 5 of article 45 of the Media Act, although the judgement had in part altered the grounds of the PTA Decision no. 10/2018. There, the judge confirmed, among other things, the PTA conclusion that Siminn committed an infringement against GR with its behaviour.

Then Siminn says that GR had over 50% market share in the company's operating territory on the relevant wholesale markets. This is incorrect, as at end of year 2020, GR had 47% market share in the company's operational territory.

Siminn also refers to the Siminn TV service not being an electronic communications service. The PTA agrees that the sale of TV content is not electronic communications service, but the PTA conclusion in the above specified decision was that the service of offering TV distribution over IPTV systems was that. On the other hand, the District Court did not agree with this. The PTA was not satisfied with this conclusion of the court and has appealed the case to the National Court, where one can expect a decision in 2021.

Siminn finally asserts that "alleged" problems regarding Siminn TV service are of a historical nature and that the PTA should be forward-looking. The PTA reiterates that the take-up of Siminn OTT service is [...]. The fact that something is on offer, that the general consumer does not consider an option, does not solve the problem. The large number of competition problems that the PTA has identified in Section 10.2 in the preliminary draft, are both real and potential.

In February 2021, however, Siminn announced that the company's content, including Siminn Premium will be available later in 2021 on Apple TV and in the company's updated app, but these solutions do not require the customer to rent a special set-top box from Siminn, as is the case with the company's IPTV solution and the aforementioned OTT solution "independent of network" which Siminn introduced in August 2018. Furthermore, reference can be made to the above-mentioned agreement between Siminn and GR from July 2020, which finally

was implemented in late august 2021, when Siminn begun offering its electronic communications and television services on GR network, for the first time. These factors should reduce the detrimental competitive effects that Siminn's television service arrangements have had since the autumn of 2015.

Within "real" competition problems there are problems that have arisen and have been solved in part or entirely with intervention by the PTA and/or the CA. Although problems may no longer be in place after such an intervention, or that there are fewer problems, demonstrate that the Siminn Group has proven to have behaved in recent years in a manner that creates competition problems. It is not out of the question that another kind of behaviour of the Group, which creates competition problems could arise in the future, should the opportunity for such be in place. The PTA is precisely forward looking in its analysis, contrary to what is implied by Siminn, with a view to endeavouring to minimise possibilities for parties with SMP to abuse such power and limit competition, and thus harm consumers.

Siminn considered that it was remarkable to examine the PTA analysis with respect to the PTA Decision no. 10/2018. The PTA had almost always described Siminn behaviour in the GR marketing territory as a substantial competition problem, without having presented actual data in support of this. Siminn pointed out that the District Court had rescinded the PTA decision in part and for that reason, the PTA assessment of these issues should be reviewed. In the light of the planned agreement between Siminn and GR, it was on the other hand unclear what significance this discussion would have. It was however undisputed that Siminn had not infringed against Vodafone in an unlawful manner. It was also undisputed that GR had succeeded in increasing its customers from 20,000-30,000 during the period of the investigation, which confirmed that the case had had no impact on GR.

The position of the PTA

The PTA reiterated that the District Court came to the conclusion that Siminn had infringed against GR, but altered the grounds of the PTA Decision no. 10/2018, in part and reduced the fine that PTA had imposed on the company from ISK 9,000,000 to ISK 7,000,000. Siminn thus breached the provisions of paragraph 5 of article 45 of the Media Act. The PTA cannot see that the Administration needed to gather more data on this breach, which had been confirmed with respect to GR with the judgement in question.

Siminn says that in the light of the planned agreement between Siminn and GR, it was unclear what the significance of this case had in the market analysis. The PTA reiterates that after consultation on the preliminary draft was submitted for consultation, Siminn and GR made an agreement on the entry of Siminn into the GR fibre-optic network. The PTA refers to its prior discussion on the nature and force of this agreement and its possible impact on the relevant wholesale market. Reference is made to this.

Then the PTA reiterates that competition problems need not be real or still in place for it to be appropriate to impose specific obligations on a party with SMP. It suffices that there is a possibility. The purpose of describing behaviour where the Siminn Group has, by the PTA, the CA, Appellate Committee or by a court, been judged to have breached the law or obligations that rest on the Group, is to demonstrate that the Group has on many occasions

throughout the years, leveraged the opportunity and the capacity inherent in such market power, to limit competition and thus harm consumers. Many of these cases are relatively old, while others are recent, and one actually reaches to the year 2020. The CA also has several cases pending concerning the harmful competitive behaviour of the Siminn Group. For this reason, the PTA considers that discussion on this matter and other similar matters have considerable significance for the imposition of obligations.

The PTA will revise its discussion in Section 10.2.5.5 in the preliminary draft (Appendix A) with respect to above issues and other issues that have transpired subsequent to the preliminary draft, having been submitted for consultation at the end of April 2020.

Siminn pointed out that the analysis and PTA statistical data showed that Siminn's behaviour had not had a negative impact on GR. It was clear from the judgement of the District Court that the PTA interpretation of the impact on Siminn competitors was not reasonable. The PTA interpretation and confusing position in the case, where it was almost asserted that Siminn had been obliged to hand over its visual content to Siminn competitors, had resulted in considerable costs. The PTA was responsible for this and also for lengthening the duration of case procedure and decision beyond all reasonable bounds. According to the interpretation of the court, Vodafone should never have been a party to the case, only GR:

"The PTA furthermore clearly considers Vodafone to be a party to the case in question. Vodafone brought the case and up to this point in time, had played an active role in case procedure. The Siminn claim appears to be that Vodafone should become a party to the case, if GR being party is denied, but shall not be a party if GR is accepted. The PTA does not agree with Siminn's view."

If the PTA had made the right decision in the case, it might have been possible to reach an agreement with GR much sooner, as it would have been clearer where the real obligation lay. The participation of Vodafone thus appears only have been to complicate the case and extend the duration, when one looks closer at the matter. Siminn had for example at the PTA request, gathered considerable data related to this aspect of the case.

The position of the PTA

The PTA refers to its previous answers here above with respect to the above comment from Siminn on the much-discussed TV case.

The PTA repeats that in the PTA Decision no. 10/2018, it was not prescribed that Siminn should hand over its visual content to its competitors. It was clearly stated that agreements with Vodafone and other service providers had been one route that Siminn could have taken to avoid a breach of paragraph 5 of article 45 of the Media Act. Another route would for example have been an adequate OTT solution, and one can note here that soon after the above specified PTA decision was made available, in August 2018, Siminn announced an OTT solution based on a special set-top box. As has previously been stated, this solution has not been very popular with consumers in this country. Yet another way for Siminn would have been to sell the TV operations.

Siminn deliberations to the effect that Vodafone should never been a party to the case, are in the opinion of the PTA of no consequence here. Siminn had at that time been able to present this argument, and the PTA would then have made an appealable decision on this issue. Nor can it be seen that the District Court suggests this either, as the judgement mainly came to the conclusion that Siminn had, with its behaviour in question, not breached the provision in question against Vodafone, but only against GR. The PTA, and Vodafone were not satisfied with this part of the judgement and appealed to the National Court, and one can expect a conclusion from the National Court in 2021. Then it will finally be clear, as long as the case does not go all the way to the Supreme Court.

Then Siminn says that if the PTA had made the right decision in the case in question, it might have been possible to reach an agreement with GR much sooner, and it would probably then have been clear where Siminn's real obligation lay. The participation of Vodafone thus appears only have been to complicate the case and extend the duration.

The PTA totally rejects these Siminn deliberations. As previously stated, the final conclusion from within the court system, including with respect to what is called the Vodafone part of the case, is not yet available. Siminn must itself organise its operations such that it complies with the law and obligations that rest on the company at any given time. The company cannot transfer that responsibility to the authorities. Siminn finally made an agreement with GR in July 2020 after years of endeavour by GR in this respect. Siminn had therefore had the opportunity for many years to avoid breaching the provisions in question of the Media Act. Siminn cannot transfer that responsibility to the PTA.

Nova referred to paragraphs 1220-1242 in Section 10.2.5.6, that discusses Siminn Group pricing policy in wholesale and retail. Nova considered that there was much that indicated that cross subsidies were being used. Changed obligations could change pricing that could possibly limit the risk of such behaviour. Reference is here mainly being made to changes where investments for development of Míla fibre-optic (and Míla purchase of fibre-optic networks) would be included in the cost base for assessment of prices. In the opinion of Nova, this could result in an increase in Míla local loops and a changed division of revenue between Míla and Siminn. This change should not need to increase the price to consumers, but rather adjust Siminn's excessive markup in retail. This could change the position of those that competed with Míla in wholesale.

Then one could mention that Siminn had not only been increasing the retail price of the line charge, but voice telephony, where Siminn had very strong dominance, has increased very significantly. Nova considered it to be likely that Siminn would leverage its strong market share in voice telephony to subsidise, for example, entry offers to new customers. In this way for example, Siminn increases in the tariff for voice telephony on 1 February 2020 had few other arguments to support it, and Siminn then increased for example, the monthly charge to customers in the subscription line "ISK 0/minute" by more than 13%. There was also a Siminn increase in voice telephony on 1 December 2019, when Siminn had increased the start charge for voice telephony from ISK 15 to ISK 17.

Nova considered that in these increases, Siminn had on the one hand been taking more revenue from customers that still used voice telephony and that had little choice of anything other than Siminn, and also encouraged use of the subscription line "ISK 0/minute", and this line was part of the Siminn Heimilispakki (Home Package) and therefore free there. One

could therefore consider it likely that the purpose of the increase had been to make yet another incentive for customers to rather purchase the Siminn's Heimilispakki (Home Package) than separate services. In other words, with an increase in the price of the service when it was purchased as a single item, the Heimilispakki (Home Package) was made more attractive and there was greater inconvenience for customers who purchased separate services.

Siminn thus use the voice telephony market to protect its strength and position vis-à-vis existing customers where, through its voice telephony transactions, it had good access to customers. In this respect, the market was important and valuable for Siminn, despite the fact that Siminn spoke of the market as "dying". Siminn revenue from the "dying market" in question was still about ISK 1.5 billion per annum where customers using this service with Siminn had only decreased by about 11,000 since 2014. Since 2014, total Siminn revenue from this market had probably been about ISK 13 billion, and one could assume that gross profit had been very good as the service was based on old technology and where the new technology that was taking over, was based on much less expensive solutions than the older technology.

The position of the PTA

The Nova comments support the PTA conclusion that there is not effective competition on the retail market for broadband connections in this country and that the Siminn Group is in a dominant position which the company can leverage in a number of ways to make it difficult for competitors.

As has previously been stated, the PTA decided to retract the obligation for cost analysed wholesale tariff for fibre-optic local loops and bitstream service based on fibre-optic local loops and to impose instead, an ERT obligation on the Siminn Group, for service based on fibre-optic local loops. The PTA considers that the ERT obligation will ensure that there will not be margin squeeze between wholesale prices of fibre-optic service from Míla and Siminn retail service which is based on fibre-optic local loops. Such an obligation should be advantageous for electronic communications companies competing with Siminn in retail and should level the position of the companies on this market. Reference is made to the additional consultation opened by the PTA on 30 October 2020, with respect to arguments for this change in the Administration's plans, and in Appendix C, which discusses the conclusions from that consultation.

An ERT test does not however address potential over-pricing in retail indicated by Nova, but such alleged behaviour is in the remit of Competition Authority surveillance, which is investigating that issue.

Siminn commented on PTA discussion on pricing of Míla line charge and Siminn pricing in retail. The PTA asserts that there were indications of subsidising by Míla. Siminn on the other hand, could not see what the nature of these indications could be. It was also asserted that the "larger" electronic communications companies were acquiring increased gross profit with pricing on line charges. Whether this reference was to Siminn, Vodafone or Nova was not clear. It seemed that the PTA thought that the difference between wholesale price and retail price was too great. It was however not said what was a reasonable gross profit, and no attempt

was made to provide guidance on this. It was established that the PTA had said that pricing of electronic communications service in Iceland was among the lowest known, and thus unclear what the PTA accusation was.

Simin pointed out there were no data indicated by the PTA to the effect that Simin pricing or that of other companies of line charge was abnormal, so the discussion had no significance for the PTA market analysis. Assertions that "it was not possible to exclude" that Siminn income from line charge had been used to fund Míla investments were unfounded. Siminn had proved that Siminn's decision on pricing had been taken on the basis of Siminn retail sales and operation of Siminn retail, with a submission that had been delivered to the PTA. One could not deduce from the data list that the PTA had, prior to publishing market analysis, gathered information from Míla or investigated Míla pricing, which means that there were no indications of whether Míla pricing was too low, too high or perfectly correct. As the PTA had not investigated this as one could deduce from the data list, the PTA should leave out this discussion. Siminn emphasised that the fact in isolation, that GR had complained about Siminn because of the case, was not the same as there were indications that the GR complaint was correct. In the PTA Decision no. 14/2018 on increase of Siminn line charge, discussion from the PTA that supported the PTA discussion in the preliminary draft, was nowhere to be found. There needed to be consistency between PTA decisions and the market analysis. There was no place for deliberation about unproven issues in a decision on rights and obligations of parties.

Other electronic communications companies have priced Míla local loops in a comparable manner to Siminn and thus it was not possible to maintain that Siminn's pricing was abnormal. With respect to the PTA deliberations that Míla and Siminn pricing of line charge had some impact on Tengir, it was sufficient to rebut such assertions with a reference to Tengir market position in the relevant area. [...] The PTA was putting forward accusations that were not based on data and had not been investigated. On the contrary, Siminn pricing was such that there was an incentive for customers to choose the Tengir system rather than Míla. The PTA should have investigated this matter. Gross profit from line charge had to a large extent remained unchanged with Siminn and the average cost increased naturally with the increased number of fibre-optic connections, which were more expensive than copper connections. Siminn pricing took this development into consideration.

The position of the PTA

The PTA refers to discussion here above about Míla prices for access to fibre-optic local loop with Access Option 1¹⁶. Then it was stated that Míla price for the service did not increase from 1 June 2017 until 1 September 2020, i.e., in over 3 years. The increase in the Míla monthly charge for fibre-optic local loops with Access Option 1 during the period 1 June 2017 until 1 September 2020, was 7.7% in the Capital City Area and Akureyri and was 4.6% in the countryside. At the same time, the consumer price index increased by approximately 12.5% and for this reason Míla prices for this service have dropped in real terms during this period.

-

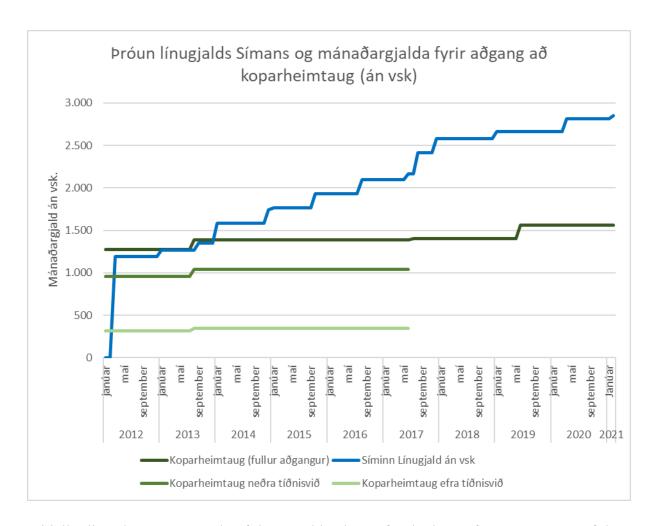
¹⁶ This is the access that is most often purchased by electronic communications companies in the case of access to Míla fibre-optic local loops.

This Míla pricing policy indicates predatory pricing by the company and GR and Tengir have pointed out that this could be the case and these companies were very aware of costs for fibre-optic network deployment. The PTA has however not cost analysed this Míla service item, and for this reason the PTA cannot state whether there is predatory pricing or not. It is possible that this real drop in price could be explained by Míla having achieved greater efficiency as the number of fibre-optic local loops increases.

It could on the other hand be to the advantage of the Siminn Group to predatory price temporarily certain service to improve its competitive position even further when the Group has the opportunity to recoup such predatory pricing in the light of its position as a vertically integrated company.

With respect to pricing of line charge, the PTA refers in its discussion here above on paragraphs 1187, 1224 and 1232 in the preliminary draft, where the PTA points out the difference between the wholesale price of copper local loops and the Siminn line charge, and Siminn is the largest purchaser of copper local loops. The wholesale price for copper local loops is ISK 1558/month ex VAT. In January 2020 the Siminn line charge was ISK 2661/month ex VAT and the difference between the wholesale price and retail price is ISK 1103/month. At that time, Siminn leased about [...] copper local loops from Míla which means that Siminn gross profit from line charges was ISK [...] /month at this time.

In April 2020, the Siminn line charge then increased to ISK 2815/month ex VAT and in February 2021 the Siminn line charge is increased to ISK 2855/month ex VAT. Now the difference between Siminn line charge and the wholesale charge for copper local loops (ex VAT) is ISK 1297/month for each local loop (83% markup). To the best of the PTA's knowledge, this is a case of simple resale so one must consider this a very generous markup compared to what has been customary in Siminn Group cost analysis throughout the years, which has been about 20% in the case of simple resale. The following figure shows the development of the Siminn line charge and the Míla price for copper local loop.



Initially, line charge was resale of the monthly charge for the lower frequency range of the copper local loop and the markup was then 24%. As can be seen in the figure, the Siminn line charge increases steadily and it is therefore clear that Siminn annual profit from resale is significant, even though copper local loops are on the decline. In the opinion of the PTA there is a lot that indicates that 83% markup in resale of copper local loops to consumers is a very high markup.

With respect to access charge of other parties to copper local loops, Vodafone is next to Siminn in terms of number of leased local loops, while other companies are releasing much fewer copper local loops from Míla. The Vodafone access charge was ISK 2,734/month ex VAT in January 2020 and at that time Vodafone leased [...] copper local loops from Míla. Vodafone gross profit from the lease of copper local loops was therefore by comparison, significantly less, or about ISK [...] /month. In February 2020, the Vodafone access charge increased to ISK 2815/month and on 1 January 2021 it increased to ISK 2895/month.

With respect to discussion on pricing of electronic communications service in Iceland in comparison with other countries, it is appropriate to point out that the line charge was for an extended period of time not included in that comparison. When it is included, the prices in Iceland are among the highest in Europe.

The PTA does not need to prove that Siminn had used profits from the line charge to fund Míla investments in its fibre-optic network, or so that Míla could predatory price its fibre-

optic local loops. The PTA is here indicating a possibility for the Siminn Group to utilise its dominant position to make things difficult for competitors. Míla has been funded by the Siminn Group, which means that the Group, by the strength of its position as a vertically integrated company, has the opportunity to predatory price Míla fibre-optic local loops and recoup its costs with excessive line charges on copper local loops. No other electronic communications company on this market has such an opportunity for such cross subsidy.

Though other electronic communications companies have priced their access charges in a comparable manner to Siminn, none of them has anything like the number of copper local loops, on lease as Siminn. Siminn's gross profit from the resale of Míla fibre-optic local loops is furthermore greater than the gross profit of other electronic communications companies from the resale of Tengir and GR fibre-optic.

With respect to assertions about Tengir market position, there were [...] local loops leased out with Tengir at end of year 2020. According to Tengir data, Siminn leased less than 1% of them. Míla on the other hand, leases considerably more than half of them, i.e. about [...]% of Tengir' local loops and provides its GPON bitstream service over them. Vodafone then leases [...] of the remainder, and other parties leasing from Tengir are much smaller. Overall, Tengir has about [...]% share of the local loop market in its operational territory and Míla then has [...]%. Siminn then enjoys almost [...]% share in the retail Internet connections in the Tengir operational territory. From Míla data on local loop and bitstream service one can see that at end of year 2020 there are [...]% of Míla GPON service in the Tengir operational territory provided over local loops leased from Tengir [...].

Síminn is also by far the largest customer of Míla GPON service, i.e. almost [...]% of connections in the Míla GPON system in the area. Siminn Internet service through Míla GPON is just over 50% of all of Siminn's Internet service in the Tengir operational territory. Just under [...] of the services provided over Míla xDSL, which again is based on Míla copper local loops. It is therefore not entirely true when Siminn asserts that the majority of Siminn connections in the Tengir operational territory go over Tengir fibre-optic local loops. The position of Tengir is such that the company is very dependent on a few large customers, and one must consider the countervailing buying power of customers quite strong vis-à-vis Tengir, not least the Siminn Group. It is appropriate to point out that in the Tengir operational territory, Siminn leases [...] copper local loops from Míla, of which [...] are in Akureyri and the company collects line charges from these. Siminn leases just over [...]% of the copper local loops that are leased out in the Tengir operational territory and just over [...]% in Akureyri, i.e. a large majority of the copper local loops in use in the area.

Siminn markup with line charge in resale of Míla copper local loops is 35% in the Capital City Area and Akureyri and 15% in the countryside. Though the Siminn markup on fibre-optic local loops is small in the countryside compared with the Capital City Area in Akureyri, this is however unacceptable markup in resale in the opinion of the PTA, and in addition to this, these fibre-optic local loops are only a fraction of the local loops that Siminn is reselling. The PTA cannot see that it is necessary for Siminn to maintain 83% markup on copper local loops to pay the cost of this resale, if that is what Siminn is suggesting in its comments.

Míla referred to the discussion on the GR complaint about Siminn Group behaviour, see paragraphs 1222-1228. Míla had totally rejected GR assertions that the price for access to fibre local loops was too low, see Míla submission to the CA. Míla could not see otherwise than that the main reason for the planned PTA decision on price obligation was an assertion by a competitor of the company that the company had predatory priced its products (which the PTA immediately used as grounds). These assertions did however not hold, and the GR purpose was simply that Míla be made to increase prices, which would impinge on Míla's competitiveness and in the end, on end users of the service. The grounds for these accusations had in no way been investigated by the PTA.

The position of the PTA

The PTA refers to discussion here above about Míla pricing policy for access to fibre-optic local loop with Access Option 1. The PTA has not asserted that there was predatory pricing, but indications of predatory pricing had been received from GR and Tengir, who are well acquainted with the cost of fibre-optic rollout. When the Míla pricing policy is examined, then it rather supports these indications than refutes them. There is discussion here above on the Siminn pricing of line charge.

In the current situation on the market, where Siminn is by far the largest purchaser of copper local loops, there is a possibility that the Siminn Group could benefit from predatory pricing fibre-optic local loops in order to subvert competition from infrastructure companies and to overprice line charge of copper local loops in order to recoup the loss that might be incurred with such behaviour. No other company is in the position that the Siminn Group is in, and although the indications from GR and Tengir have not been proven, it is clear that the possibility to use such behaviour supports the PTA imposing obligations on the Siminn Group, that provide competitive restraint in pricing, as the Group has SMP on the relevant markets.

The PTA has retracted the imposing of cost analysed obligation on Míla fibre-optic local loops and instead, the PTA intends to impose an ERT obligation on the Group. The main PTA argument for this changed approach is that there should be an incentive in place for investment in fibre-optic local loops. There is further discussion on the PTA arguments for imposing an ERT obligation later in this document where there is discussion that relates to obligations for price control. Reference is also made to the additional consultation opened by the PTA on 30 October 2020, with respect to arguments for this change in the Administration's plans, and in Appendix C, which discusses the conclusions from that consultation.

Míla referred to paragraph 1186, where among other things it states that the market for local access in this country is characterised by considerable oligopoly. Only one company, i.e. Míla, controls a network with national coverage, and at no location were there more than two parties competing on Market 3a and at many places outside the main urban areas, Míla was the only party on the market. The market is characterised by substantial entry barriers where it has proved rather difficult for new companies to establish themselves, and it took a long time for GR and Tengir and costs were high. As the market was very small, with respect to the number of end users compared with most other domestic markets in the EEA, new

investments were risky and there were few who had the capability of developing a network in competition with Míla.

Míla noted that GR had an advantage over Míla, as the company had been able to embark on major investments in the shelter of a public company OR, when the Siminn Group had needed to watch every penny subsequent to the bank crash in 2008.

The position of the PTA

In its answers, the PTA has discussed OR ownership of GR and the PTA surveillance in this connection (see Section 9.3). PTA information on investments do not indicate that Míla found it any more difficult than GR with respect to investments subsequent to the bank crash (see Section 8.4.6). It is certainly true that GR has deployed more fibre-optic local loops than Míla, but against this there is the fact that the Míla network is much more widespread and can offer high speed connections across the whole country, either with fibre-optic or xDSL technology. In addition, one has to keep in mind that there has been considerable growth in the Míla fibre-optic network during recent years and the gap between Míla fibre-optic numbers and those of GR is rapidly shrinking. In addition to this, the GR fibre-optic network has been under development for a much longer period of time than the Míla fibre-optic network, that is to say, well over a decade.

Míla. referred to paragraph 1187, where it was stated that since the last analysis was published in 2014, GR had increased investments in its fibre-optic network and it now reached a large part of South West Iceland. GR now had about 32% share in the wholesale market. This development by GR had however not resulted in Siminn and Míla having felt obliged to reduce their retail prices in the GR operational territory. There were indications that the Siminn Group kept prices low, or sometimes even subsidised on the relevant market and on the wholesale Market 3b with high markup and thus profit on the line charge at retail level in connection with household connections and with a certain behaviour in connection with corporate connections, thus significantly constraining the competitive grounds for independent network operators such as GR and Tengir. GR and Tengir were not vertically integrated electronic communications companies and therefore had no option for answering such behaviour by the Siminn Group.

Míla said this was an incredible statement by the PTA, which it rejected as unfounded assertions. Copper local loops were based on cost analysis and fibre-optic local loops were more expensive. The local loop price for copper was far in excess of the EU/EEA reference. According to the Settlement, Míla needed to fund its operations at market interest rates. Míla pointed out that both the PTA and EJAF had investigated these accusations and neither party had found any basis for them. Míla therefore raised a serious objection to the Administration making such assertions now. This could hardly be called public administration procedure. It also needed to be investigated whether other electronic communications companies have a similar markup on Míla local loops, and in retail there was competition and free markup on this market. It was necessary to examine cost structure within these companies and what was included in the service to the customer that was being collected in the retail price. Míla demanded that these unfounded assertions be removed and allowed itself to doubt the

neutrality of the PTA in market analysis in the light of these loaded and unfounded assertions by the PTA against Mila in the preliminary assessment.

The position of the PTA

As stated here above, there are indications that Míla could be predatory pricing its fibre-optic local loops and that Siminn is practising excessive markup on copper local loops with the line charge. The indications of Míla predatory pricing are comments from parties to the market that know the cost of fibre-optic rollout and the Míla pricing policy for fibre-optic local loops delivered in Access Option 1 which is described here above. The Administration has also intimated this in its comments that were received on 27 November 2020, in connection with the additional consultation that the PTA opened on 30 October last year. The indication of large Siminn profit from line charges is e.g., the 83% Siminn markup on resale of copper local loops and the number of local loops that Siminn rents from Míla which is far in excess of the number that others lease from Míla. Míla has been funded by Siminn, on the one hand with ISK 11,600 million own capital contribution and on the other hand with an ISK 8162 million loan, and funding from the parent company totalled ISK 19,762 million at the end of 2019¹⁷. Though the Siminn loan to Míla is at market interest, as maintained by Míla, it is clear that profit from the line charges lessens the Group's need for external funding for Míla investments.

It is clear that the PTA cannot assert that this is the case, without an extensive investigation being conducted, and the PTA has not done that. The PTA is however obliged to take into account how the Siminn Group can leverage its market strength, and the fact that the Group is vertically integrated. It is therefore clear that the Siminn Group is in a position to utilise the current situation on the market to conduct cross subsidy, as described here above.

The PTA dismissed the complaint on the pricing of fibre-optic local loops with its Decision no. 14/2018, as the Administration considered that it lacked authority to rule on the pricing of fibre-optic local loops. Copper local loops are subject to price control, and the PTA intends to maintain that price control obligation. The PTA has now requested that Míla submit a revised cost analysis of copper local loops for the operating year 2020 and one can expect that a PTA decision will be available later in 2021.

With respect to Míla comments that there was competition and free markup on this market in retail, the PTA wishes to point out that it is the conclusion of the PTA that competition in retail is very limited and that Siminn has very substantial market strength despite the wholesale obligations currently in force on Míla. The same competition legislation applies to the retail market and the PTA refers to Section 10.2.6 here below with respect to the Siminn Group issues that are being examined by the CA, which includes a complaint about Siminn line charges.

Míla referred to paragraph 1188 where among other things, it is stated that Míla market share had decreased from 83% since the last analysis to about 63% in mid-2019 and that the

-

¹⁷ The debts of the parent company are guaranteed by pledges in Míla assets.

company therefore still has a massive market share. It was then said that the incentive of the Siminn Group for selling products that were not bound by obligations, appeared to be little.

Míla pointed out that a drop in market share from 83% to 63% was very significant, as they were an infrastructure company where investments were made for decades. If the Capital City Area were examined separately, then the reduction would be even greater.

Míla demanded that the PTA explained the conclusion that "incentive of the Siminn Group for selling products that were not bound by obligations, appeared to be little". In the opinion Míla, this was an example of loaded PTA assertions about the Siminn Group, without any arguments or data are being presented. Míla had commenced on-site service and shift service for electronic communications networks for other parties, and Siminn provided various services that were not bound by obligations.

The position of the PTA

The PTA has discussed development of market share above and there is no reason to embark on detailed discussion here. It shall however be noted that the reduction in question in share covers a seven-year period and the Míla share is still dominant on the market. It is the assessment of the PTA, see prior discussion that the share will continue to be almost so high throughout the period of validity of this analysis, that it leads, along with other factors, to continuing SMP.

There are various examples of the companies in the Siminn Group, not having acceded to requests for access that the Group considered not to be covered by obligations in force. In this context one can among other things mention the PTA Decision no. 34/2010, and in that case, Míla denied a request for facilities for NATO fibre-optic, among other things because Míla considered that access not to be covered by existing obligations. The PTA Decision no. 28/2011 concerned denial of access to dark fibre in a trunk line cable that Míla considered that it was not obliged to provide pursuant to obligations in force. This is similar to the case in Decision no. 38/2012 on Access Option 1 in VDSL with Siminn. One could also mention Decision no. 34/2014 on the Snerpa access request to Míla street cabinets, and Decision 15/2020 on facilities for demarcation boxes in technical spaces. In addition to this, one could mention denial of access to TV material that has been discussed here above. Despite the fact that there are very many examples of access requests being denied on the basis that the service in question was not covered by obligations, the PTA agrees to change the wording such that it will be taking into account that some service types are on offer without them being bound by obligations.

Míla referred to paragraph 1189, where it is stated that vertical integration of the Siminn Group was conducive to limiting effective competition in a number of ways. The Siminn Group was however in a totally dominant position vis-à-vis GR for corporate connections and GR had found it difficult in this area, despite endeavours in sales campaigns. Various aspects of the Group's behaviour with respect to vertical integration had been examined in recent years and in addition to this, the PTA had received reports from competitors of the Group about behaviour that in their opinion, constituted irregular behaviour.

Míla considered that this GR complaint would not stand up to scrutiny. GR, for example serviced most municipalities in its service territory with connections, which included schools and nursery schools and most institutions of the municipalities. Míla did not have information about the position of GR on this market, but the PTA assertions that GR did not have significant market share on the corporate market was quite implausible. Míla considered that the PTA needed to examine whether the data the Administration had received from GR was correct. In recent times, GR has rolled out fibre-optic to all companies in its service territory in a comprehensive manner. Míla on the other hand, has generally installed such lines on the basis of orders. Míla considered that here there could possibly be a difference in the use of the concept corporate connection, i.e., whether it meant a connection on Market 3a or Market 4.

The position of the PTA

GR has described that the company finds it difficult to get under way on the corporate market. The PTA does not have sufficiently good data to hand at this point in time, to be able to present unequivocal conclusions about the state of competition on the corporate market. One will have to wait for further analysis of Market 4, which will take place sooner than later. The precise position of GR on the corporate market does not have a definitive impact on the analysis of Markets 3a and 3b, so it will therefore not be examined more closely in this context. On the other hand, the PTA will change the wording of the paragraph such that it is clear that this is a complaint from GR and not an assertion by the PTA.

Míla referred to paragraph 1192 where it was stated that GR operated its own network mostly independent of Míla, but it was worthy of note that many of the smaller networks were not in direct competition with Míla but rather cooperating with the company and in a large number of cases, Míla had purchased the networks or leased long term. It seemed to prove difficult for the owners of the smaller networks to operate them and their active equipment, which was where Míla had entered in a strong position. Míla was responsible for the operation of GPON connections on over 20 such networks. Míla had also acquired ownership or long-term lease of about 20 networks in addition. This had not been an option available to GR because of a lack of their own trunk line connections outside the south-west part of the country and according to the company because of less economic terms offered by Míla for such trunk line connections.

Míla said that it was expensive to lease a trunk line network, as it was costly to run. As the PTA well knew, the lease price on the trunk line market was based on cost. Míla leased to all parties on the same terms, within the Group as to others. It was true that it was expensive to operate countryside systems and that was precisely the reason why Míla considered it important to segment the market geographically, as it was unreasonable and unfair to let competitive areas subsidise these expensive areas and thus weaken the Míla position and strengthen the GR position, which was now in a dominant market position in Reykjavik.

Networks that were built up with state aid, as with Iceland Digital Connected, had an obligation to provide access on a basis of parity. The PTA was here embarking on a particularly risky journey to try to make it suspicious that Míla should offer service on these fibre-optics systems, which was the same purpose as when they were built, i.e. that service

providers provided service over them. Míla had considered it to be community service to provide service over networks of smaller parties. These were usually such small units that there was no basis at all for these parties to operate active equipment, except by collecting a much higher charge than was customary. As these networks were all developed in areas where the market had failed, there was generally no interest among the owners to operate these networks in competition with parties to the market. This is why they had generally requested that Míla provided service over these networks. There was no obstacle to other network operators also providing service over these networks, and Vodafone had done this in a number of instances. The fact was that opex and capex for building these networks was considerable, and as they held few connections, these companies/municipalities had not considered that it paid.

Míla considered the PTA views in this case to be bizarre. Instead of welcoming that someone provided service over these networks, efforts were made to make it suspicious and that Míla was guided by some devious objectives. Míla asserted that there were no barriers to GR or other parties offering bitstream over the systems and GR assertions about the impossibility of building up its own bitstream system on these networks were wrong. In this way, Símafélagið had developed a trunk system with national coverage before the company merged with Nova.

In connection with price for trunk line connections, these were cost analysed prices. Míla wondered whether the PTA was suggesting that the Administration's cost analysis was not in accordance with costs incurred for trunk line networks. The price of Míla trunk lines was cost analysed by the PTA. Míla was amazed that the PTA appeared to adopt GR arguments as its own, without any scrutiny, in connection with why GR had not moved more out into the countryside. With the arrival of these networks, that were developed with state aid, Míla hardly had revenue from these areas on Market 3a. It was thus clear that these companies were Míla competitors and took market share from the company.

The position of the PTA

The PTA objects to it being asserted in the analysis that Míla purchase and operation agreements for countryside networks were dubious or suspicious. The PTA simply considers that it demonstrates Míla's strength that the company is practically the only one that feels confident to operate connections on these networks. Purchase of such networks increases the Míla distribution of a fibre-optic local loop network, and this is also conducive to increasing the company's market power at national level.

The PTA is not suggesting that the Administration's cost analysis of trunk line networks is incorrect but is reporting an assertion by GR that the company considers terms for trunk line connections to be uneconomical. The PTA does not adopt this assertion. The fact that a company considers terms uneconomical does not necessarily result from the cost analysis being incorrect, but there could be various contributory factors such as the size of the units on offer for sale.

Míla refers to paragraph 1193, where it is stated that it could be it was not realistic for owners of the smallest networks to take part in their operation and to invest in active equipment and other necessities to provide retailers and thus consumers with the necessary service. It could

thus be that in most instances there are no other possible operators available than Míla, among other things because Míla operates the country's only trunk line system with national coverage. This position illustrated the strong position of Míla as the only company with national coverage in this country in access and trunk line networks. This development was also conducive to strengthening Míla's position on the market and resulted in new investments in smaller networks not bringing increase competition on the market.

Míla said that development of bitstream service did not require a trunk line system with national coverage. The electronic communications companies themselves operated an IP transit network with national coverage for access network service across the whole country. Míla did not have or operate an IP transit network with national coverage for access network service, but rather purchased service in wholesale from Siminn in accordance with the CA Settlement. There was very little demand for this service in Míla wholesale, and this is something that the PTA should know.

The position of the PTA

The PTA considers that despite the fact that other companies could set up their own IP transit network with national coverage, this was more difficult for smaller companies than for the Siminn Group. The Siminn Group has a trunk line network across the whole country and an IP transit network on top of that, and this gives the Group a certain advantage. Experience shows in any event, that other companies have not been prepared to offer bitstream service and a national level. On 1 January 2021, the IP transit network was transferred to Míla from Siminn, which means that both layers are now the responsibility of Míla. In the opinion of the PTA, this strengthens Míla's position in competition with GR, Tengir and other smaller electronic communications infrastructure companies.

Míla refers to paragraph 1195, where it is stated that as an example, one could mention that it had been for some time extremely difficult for companies to gain full access to the Míla VDSL system. Vodafone, for example repeatedly requested access to VDSL with multicast on Access Option 1 over a period of months, but Míla had only offered Internet transmission on Access Option 3 in VDSL. A decision from the PTA had been necessary before the Group desisted from this behaviour. With such access Vodafone could have offered its customers access to the company's IPTV system through Míla networks. More specifically, Míla for some time did not offer access to multicast for parties other than Siminn, nor access to Access Option 1 except with major and detailed conditions, among other things with respect to a projection on the number of customers at each location.

Míla stated that here the circumstances of the case were not properly reported by the PTA, which was surprising. This dispute first took place during the years 2011-2012 while these systems had still been in operation with Siminn and not Míla. At the time that the existing access system had still been with Siminn, a dispute had arisen between Siminn and Vodafone about the cost of equipment that needed to be installed specially, in order to provide service to Vodafone, i.e., the dispute concerned who should pay the cost of providing access and not the access itself. The dispute had been resolved in 2012 with the PTA Decision no. 38/2012, prior to the current market analysis.

Míla considered that it was not normal that the PTA should draw up issues that had been under discussion before the prior market analysis and use it as an excuse in a new decision. Particularly when one kept in mind that the service had since been moved between companies and that substantial obligations had been imposed on Míla and the service, both by the PTA and the CA. The PTA also mentioned issues in the endorsed reference offer as arguments. Míla pointed out that the issues in question had been endorsed by the market and by the PTA as normal and reasonable after detailed consultation on the terms of the reference offer. If the Administration had any objections to it, then the Administration could easily have demanded changes to it. The reference offer had been submitted for consultation, to parties to the market that could have submitted comments to it at that time.

The position of the PTA

It is true when Míla says that the facts of the case are not properly described with respect to VDSL with multicast on Access Option 1. The service was at this time with Siminn and subsequently moved to Míla. According to the description of the circumstances of the case in Decision 38/2012, there was a dispute from 2010 until 2012. The text will be corrected appropriately.

The PTA is not maintaining that this specific problem is still in place, but rather is discussing the fact that disputes on access repeatedly occur in the past years.

Míla referred to paragraph 1196 where it is stated that companies had been unsuccessful in acquiring Siminn IPTV service over their own bitstream system and that it was very important for companies to be able to offer IPTV service on their network, as it was extremely popular among consumers in Iceland. The importance of IPTV distribution was high on the domestic electronic communications market. GR had repeatedly offered bitstream access to Siminn that Siminn would use for its IPTV service. Vodafone had also been in dispute with Siminn on access to material owned by Siminn for distribution on the Vodafone IPTV system. Neither company had been successful in their endeavours to make agreements with Siminn. At the same time, Siminn had strongly emphasised the bundling of electronic communications and TV service (Heimilispakkinn), with good results from the time the policy was adopted in the autumn of 2015.

Míla pointed out that there were various possibilities for the country's inhabitants to access TV material and therefore did not understand why the TV content of Sjónvarp Símans was considered to be particularly important. For example, Vodafone had TV content through Stöð 2, similar to Siminn. Then there were innumerable options available, e.g., Hulu, Netflix, AppleTV etc.

The position of the PTA

The PTA agrees that Icelanders had various options to access TV content, for example, through streaming providers like Netflix and Hulu. Many Icelandic homes have access to Netflix, to take one example. There are many indications that in most instances, such subscriptions are in addition to subscriptions to Icelandic TV stations and/or content providers. In this connection one can point to Siminn's very good performance in recent years

with the company's Home Package, as it includes popular non-linear TV material (Sjónvarp Símans Premium) and popular linear TV material (English football).

Míla refers to paragraph 1197 where it is stated that access to the Míla VDSL system was still important in many parts of the country, as the reality was that in the areas where Míla had developed its VDSL service and another network based on fibre-optic was not in place, there was no other option for very fast broadband access. Other bitstream providers that used to have their own ADSL system in the area therefore lost a large number of the customers in bitstream service in a few months after VDSL was rolled out in the area in question. Such parties had chosen not to upgrade their systems from ADSL to VDSL and compete with Míla in provision of bitstream service but had rather moved their retail business over to a wholesale purchase of bitstream on Míla VDSL systems and had thus moved down the investment ladder.

Míla pointed out that this paragraph was remarkable in the context of paragraph 950, where there was positive discussion about GR only offering bitstream service, i.e. denied electronic communications companies access to fibre-optic, and therefore "the companies did not need to purchase the connection equipment required to connect directly to local loops.". Here, on the contrary, the discussion was in a negative tone about Míla normal upgrading of its bitstream system.

The position of the PTA

The PTA considers that it was only describing facts with respect to reactions of service providers to introduction of VDSL in areas where there were no fibre-optic local loops. The PTA does not see the discussion on the upgrade on the Míla network to be negative. In both referenced paragraphs, 950 and 1197, it is noted that the service providers in question moved down the investment ladder.

Vodafone also referred to the above specified paragraph 1197 and considered it to be incorrect that Vodafone had "chosen" not to upgrade its system from ADSL to VDSL. Vodafone had not had the option of offering VDSL, as Míla had not given the company access to street cabinets. Míla had pushed electronic communications companies out of this competition market.

With respect to paragraph 1198, the price for VULA had never been published despite requests from Vodafone.

Then Vodafone referred to paragraph 1230 and stated that the corporate prices for exactly the same service were and had been higher.

The position of the PTA

It is clear to the PTA that in most instances it is difficult or almost impossible for Míla competitors to upgrade their systems from ADSL to VDSL and will amend the wording in this respect.

With respect to paragraph 1198, the PTA wishes to state that Míla submitted cost analysis for VULA in 2016, and the tariff for the service was confirmed with the PTA Decision no. 6/2017 Cost analysis for VULA has not been revised after that because no access requests have been received.

In paragraph 1230, the PTA discusses the difference between wholesale price of line charge and retail price of line charge for home connections, so there is no reason to make a comparison there with corporate connections.

Míla referred to paragraph 1198 where it was stated that with respect to other disputes on access, in connection with Míla VDSL rollout one could mention the PTA Decision no. 34/2014 where the PTA considered that Míla had not had the right to deny Snerpa certain specific inter-cabinet connections in Holtahverfi in Ísafjörður and Míla was considered to have breached the non-discrimination obligation by not providing Snerpa with adequate information and instructions with regards to VDSL rollout in the district. The PTA had considered the Snerpa access requirements in some instances not to have been fair and normal but instructed Míla to resolve that part of the access needs by offering VULA access. From the time that the Míla reference offer was revised with respect to VULA access, no player had seen an advantage in using it, as the pricing was such that economy of scale needed to be so high for it to be realistic and there were few if any such players in this country with the exception of Siminn.

Míla noted that here the PTA was referring to a case that was nearly 6 years old, that related to an access request by Snerpa to a very small number of local loops in Ísafjörður. Míla pointed out that the PTA had recognised that Snerpa demands had to a large extent been neither fair nor reasonable. The case had caused a delay in development of the Míla VDSL system in Ísafjörður of about 3 years, and Snerpa had used the time to roll out its own fibre-optic system in the area. No electronic communications company had requested VULA access, neither over copper nor fibre-optic from the time that this obligation had been imposed on Míla. The price was based on cost analysis that had been submitted to the PTA for endorsement. It was simply too expensive to install it.

The position of the PTA

The PTA refers to its prior answers in Section 10.2.4 that relate to the reasons that the PTA considers it important to discuss various real competition problems that have arisen in communications between the Siminn Group and its competitors. It is important to demonstrate that the obligations that the PTA decides to impose on Míla are appropriate and conducive to solving real or potential competition problems that have been identified or could arise.

The PTA reiterates that here above it was stated by the PTA that competition problems need not be real or still in place for it to be appropriate to impose specific obligations on a party with SMP. It suffices that there is a possibility. The purpose of describing behaviour where the Siminn Group has by the PTA, the CA, Appellate Committee or court, been judged to have breached the law or obligations that rest on the Group, is to demonstrate that the Group has on many occasions throughout the years, leveraged the opportunity and the capacity

inherent in such market power, to limit competition and thus harm consumers. Many of these cases are relatively old, while others are recent, and one actually reaches into the year 2020. In addition, the CA has several cases pending concerning the Siminn Group. For this reason, the PTA considers that discussion on this matter and other similar matters have considerable significance for the imposition of obligations and for providing arguments for imposing them.

Míla refers to paragraph 1199, where it is stated that Míla had in a number of instances been seen to behave in a manner that was conducive to making it difficult for competitors to gain a foothold on Market 3a, both by Siminn Group behaviour inherent in the Group's pricing policy and behaviour that did not relate to prices.

Míla objected to these aspersions about cases that the company had not been informed about and thus had not been able to present its views prior to the publishing of the preliminary draft.

Míla also commented on paragraphs 1200-1211, that discuss Míla behaviour towards company competitors on Market 3a, that did not relate to pricing.

Míla noted that the PTA here explained the case from the point of view of Tengir. No attempt had been made to get Míla's opinion. Míla raised serious objections to this. The fact was that it costs the Míla bitstream system ISK 312/month to gain access to Tengir fibre-optic outside Akureyri (ISK 212/month in Akureyri). This was the charge that Tengir did not collect from its own bitstream users or for internal use. Míla therefore considered there to be compelling and normal commercial considerations behind this decision, i.e., to minimise the cost of providing bitstream service. On the other hand, it seems that the PTA tries to make it look suspicious, without having bothered to get opinions or investigate the matter.

There was nothing abnormal about Míla choosing to change partner where this was among other things more economical.

It was also appropriate to point out that it was Míla's opinion that Tengir conducted dubious business practices in its communications with Míla. It for example came to light at a meeting between the companies, regarding the Míla purchase of on-site service from Tengir, that Tengir had monitored connections where customers had cancelled the subscription and called the party in question to apply pressure to on the user to continue doing business with Tengir. Also, that employees of Tengir and Netkerfi and Tölvur monitored Míla fibre-optic connections in buildings, and calls were made to users of Míla fibre-optic to convince them to switch to the Tengir network ("Buy Local").

With respect to paragraph 1206, Míla pointed out that the additional charge in question of ISK 212, that had been added for GPON connections that switch to a network owned by Tengir, was the same as the extra charge that the Míla access system needed to pay for access to the Tengir network in Akureyri. This extra charge was a large part of Míla's bitstream charge in the area, and the company could no longer absorb this charge. At locations outside Akureyri, Míla needed to additionally pay ISK 312 for each connection, so in those cases, Míla bitstream service was absorbing ISK 100 for each connection. Míla considered that the fact that the PTA had not bothered to ask for Míla views in the Tengir case but appears to have rather intended to use it to justify even more burdensome obligations on the company, was an example of abysmal public administration procedure and indicated that the Administration did not practice objectivity in the case of Míla. Nor had the PTA any legal

authority to apply an obligation on Míla to provide bitstream service through the system of another party, when Míla had its own system.

The position of the PTA

The PTA indicates a large number of examples of behaviour that inhibit competition that have been confirmed in the decisions made by the authorities, both by the PTA and the CA. An example that relates to communications with Tengir has not been submitted for resolution to the authorities as such but is a submission by Tengir in the PTA gathering of information for the analysis. The preliminary draft, where the Tengir description appears, is not a public administration decision, but rather part of case procedure that will eventually lead to a decision. The preliminary draft is published for comment, where the objective is that those that have interests to protect submit their views, and Míla has now done that with respect to communications with Tengir. The PTA will report the Míla views in this respect, in the revised analysis (Appendix A).

Tengir also directed the complaints described in this Section to the CA, and that authority notified Tengir and Mila in December 2020 that because of priority of projects, the Authority did not intend to commence the resolution process for the time being.

Tengir has informed the PTA that the company plans to make a formal complaint about the Siminn Group behaviour as described in the sections in question, and the case will therefore enter a formal procedure with the PTA, and the Siminn Group will then be given the opportunity to voice an opinion on the complaint in a formal manner.

Finally, Míla asserts that the PTA did not have legal authority to apply an obligation on Míla to provide bitstream service through the system of another party, when Míla had its own system. The comment in question will be answered in Section 11.6.2 (Obligation for non-discrimination on Market 3b) later in this document.

Míla referred to paragraph 1220 where it was stated that the retail price of the line charge had gradually increased in recent years and the difference between wholesale price of local loops and line charge in retail, had increased steadily. A company that enjoys a strong position on the retail market for voice telephony and Internet service could acquire gross profit in the price difference between the retail price of line charge and the wholesale price of local loop lease. No company had a stronger position on the retail market in question than Siminn and one could therefore assume that the Siminn Group was in a unique position to increase the line charges in retail without taking competitors and consumers into account.

Míla pointed out that in all instances from 2016 of which Míla was aware, Siminn had not had the initiative on these increases. In all instances, it seemed that Siminn was following other parties on the market with these increases. Also, the Vodafone prices for 2017 are missing from the table. Míla therefore considered that this did not give the PTA reason to draw a conclusion as the Administration had done in this paragraph.

The position of the PTA

The PTA refers to discussion on the Siminn line charge here above, and that it is first and foremost, the Siminn line charge for copper local loops that has been examined, and Siminn

is by far the largest purchaser of Míla copper local loops. Increases in Vodafone access charge have furthermore mostly been in step with price increases from GR, and most of the local loops leased by Vodafone are GR fibre-optic local loops.

The PTA points out that in paragraph 1220 there is no table and therefore unclear to which table, Míla is referring. The PTA points out that Vodafone began to collect an access charge for GR fibre-optic local loops in July 2017, and prior to that, GR had collected this charge directly from consumers.

Míla referred to paragraph 1223 where it was stated that GR considered that Míla had breached the tariff obligation that had been imposed on Míla with the above specified decision from 2014. On the one hand by collecting increased revenue through an increase of retail price for line charges by the parent company of the Group and on the other hand by practising predatory pricing which did not reflect the real cost to Míla of providing wholesale service through the company's local loops. In the opinion of GR, Míla should have increased the prices of both its copper and fibre-optic local loops to meet additional costs from the company's fibre-optic rollout.

In the opinion of GR, the need for price increase within the Group had instead been met at retail level and in this way the Group had leveraged its vertical integration. The obligation for price control in the PTA Decision no. 21/2014 was among other things, intended to ensure the above. Though consumers might enjoy in the short-term receiving electronic communications services at a low price, distortion of competition that under-pricing caused would lead in the long term to higher prices, lower quality and fewer choices for consumers. This meant that other companies that did not have comparable financial strength to that of the Siminn Group, could drop out of the market.

It was stated by Míla that the Míla price for the largest part of its local loops, i.e., copper local loops, was subject to price control and was based on cost analysis which had been sent to the PTA for endorsement. During this period, the tariff for copper local loops increased regularly. The price for fibre-optic local loops had been much higher than for copper local loops. It was not true that the wholesale price had not been subject to price changes. The Míla price for fibre-optic local loops in the Capital City Area had thus been ISK 1305 in 2012, ISK 1417 in 2013, ISK 1750 and 2016 and ISK 1970 in the year 2017. A price increase to ISK 2120, had furthermore been announced that was to come into force in May 2020, but was postponed until the autumn of 2020 because of the COVID-19 pandemic. Míla, on the other hand, pointed out that for many years the GR tariff had remained unchanged, i.e., from January 2013 until 2017.

The position of the PTA

As is stated in the PTA discussion in paragraph 1225, the PTA dismissed the GR complaint on predatory pricing of Míla fibre-optic local loops with its Decision no. 14/2018, as the Administration deemed that it lacked authority to rule on Siminn retail price and because there was no obligation in place on Míla fibre-optic local loops. As stated in the PTA decision in question, the price of copper local loops has been cost analysed in accordance with the price obligation in force and the PTA intends to maintain that price obligation. The CA is currently processing the Siminn pricing of line charge.

With respect to the Míla prices for fibre-optic local loops, the PTA refers to the discussion here above. As stated there, Míla did not increase its access charges to fibre-optic local loops in Access Option 1 for nearly 3 years (2017-2020), and when the increase took place, it was less than the increase in the building price index. The increases that Míla discusses in its comments were made before Míla commenced a structured rollout of fibre-optic local loops, and these prices therefore only covered a very few fibre-optic local loops. In the opinion of the PTA, one also must take into account the sold quantity of the product under discussion as a product which is sold in very small quantity, has little weighting when a tariff is decided. There was little or no difference in the price of fibre-optic local loops and copper local loops until 2016, when Míla commenced fibre-optic rollout. Prior to the increase on 1 January 2016, the monthly charge for fibre-optic local loops was ISK 1417, as is stated by Míla, while at the same time the monthly charge for copper local loops was ISK 1386 per month.

With respect to the GR prices, the PTA points once again to the fact that GR does not have SMP on this market and that was certainly not the case during the period Míla was referring to.

With respect to the delay on increase in tariff that Míla says occurred because of the impact of Covid-19, the PTA does not understand the considerations that caused this. If one looks at this from the point of view of consumers, Siminn increased its line charge in April 2020, despite the fact that Míla had delayed an increase in the local loop charge for fibre-optic until September 2020. Siminn once again increased line charges in February 2021.

Míla referred to paragraph 1230 where it is stated that from the time that the above specified PTA Decisions nos. 14/2018 and 8/2019 were published, the Siminn line charge in retail rose even further and is now ISK 3490, including VAT. (ISK 2815 ex VAT). The wholesale price for Míla copper local loop lease was ISK 1558 and ISK 1970 for fibre-optic in the Capital City Area and in Akureyri, and elsewhere it is ISK 2300. It was clear that the Siminn markup on line charge for copper local loops in recent years was measured in tens of percentage points, and even up to just over 100%. The markup was somewhat less in the case of fibre-optic local loops but nevertheless rather generous. Today the differences would be 26% on the basis of the Capital City Area and Akureyri and about 47% for other areas. This difference was however not reflected in retail prices of electronic communications companies by area. Given available wholesale and retail prices within the Siminn Group and the number of users, one could roughly estimate that the Siminn markup on line charge was in the order of ISK billions during recent years.

Míla said that unless the company knew the Siminn parameters for its line charge, then there could be good reasons for the price, for example it could be that part of the revenue went to subsidising leased line costs for leased line connections for voice telephony, operation of telephone exchanges, hosting, cost of operating retail and other. It was correct to point out that the resale prices of other electronic communications companies were similar. A high Siminn price should benefit GR, as Siminn competitors should be able to offer a lower price than Siminn, but they rather purchased local loops from GR than from Míla.

The position of the PTA

The PTA refers to prior answers on Siminn line charge. As stated here above, Siminn raised an objection to discussion on the company's line charge and the PTA considers it more

appropriate for Siminn rather than Míla to discuss this. The PTA therefore considers it to be not necessary to answer Míla guesses on why Siminn should put a markup of many tens of percentage points on the wholesale price of Míla copper local loops.

Míla referred to paragraph 1232, where it was stated that the PTA considered it not inconceivable that the Siminn line charge had increased in recent years and had at least partly been used to support extensive and costly Míla fibre-optic development. It was clear that the Siminn Group benefited from having the possibility of using its vertical integration in a manner that other electronic communications companies in this country did not have at their disposal. In addition to this, such an incentive did exist, though it would not be decided here whether such abuse had taken place. Cross subsidies in pricing between wholesale and retail were among the risk factors for competition under such circumstances.

Míla said that this was an incredible and serious assertion from a regulatory body that should respect proper administrative procedure practices, including objectivity. Míla considered it to be very serious and contrary to good administrative procedures that the Administration publicly presented unfounded conjectures that were conducive to denigrating Míla. Míla pointed out that the company was a separate legal entity. According to the Settlement with the CA, Míla operations were to be autonomous. Company funding was to be on commercial terms, and a reasonable requirement for profitability made.

The position of the PTA

The PTA is not making any assertions in the paragraph in question, other than that it is a fact that the line charge has increased significantly during the past years. Vertical integration of companies with SMP results in various incentives and opportunities to use that position to increase its market power even further, and here a description is being given of opportunities to do this. Whether the opportunities have been used or not, is not a deciding factor for whether obligations should be applied to prevent them. The fact that Míla is a separate legal entity and that the company operations should, pursuant to the Settlement with the CA, be autonomous and that company funding should be on market terms, does not obviate the incentives in question or opportunities that the Siminn Group has to leverage its vertical integration. The PTA therefore considers it important that appropriate obligations are imposed on the Group on the relevant wholesale markets.

Míla referred to paragraph 1235, where it is stated that on the corporate market, GR had competed with products from Míla that were based on fibre-optic in the Míla access network, called Ljóslínur. In recent years, GR had developed a new active access network for companies in order to endeavour to increase their marketing effort on the corporate market in question where Míla had been in a dominant position, according to GR. In a submission from GR to the PTA, it was among other things stated that Míla enjoyed SMP on the market in question pursuant to the PTA Decision no. 8/2014 (Market 6 for terminating segments of leased lines, now Market 4 for high quality central access for companies). GR performance on that market has not been good and far from that which is seen on the residential market. Míla has recently commenced sale of new products on the corporate market that are based on

GPON bitstream technology at the same time as the company has been making a strong effort to deploy fibre-optic to households and companies, according to GR.

Míla stated that this appeared to be based on comments from GR and the PTA appears to adopt the GR comments. There did not appear to be any statistics from the PTA to support this. The PTA, market analysis appears to be based on hearsay and on uninvestigated complaints from parties to the market, that are used to justify further obligations on the company. Míla considered this to be contrary to good public administrative procedures. Míla pointed out that it was not the role of regulatory authorities to protect unsustainable companies, but it was rather the objective of the Competition Act and also of the Electronic Communications Act to protect consumers on the market.

The position of the PTA

GR has described that the company finds it difficult to get under way on the corporate market. The PTA does not have sufficiently good data to hand at this point in time, to be able to present unequivocal conclusions about the state of competition on the corporate market. One will have to wait for further analysis of Market 4, which will take place later this year. The precise position of GR on the corporate market does not have a definitive impact on the analysis of Markets 3a and 3b, so it will therefore not be examined more closely in this context. On the other hand, the PTA will change the wording of the paragraph such that it is clear that this is a complaint from GR and not an assertion by the PTA.

Míla referred to paragraph 1241, where it was stated among other things, that the PTA considered that with the extensive rollout of fibre-optic in the Míla access network, the product Ljóslina (optical line), which previously was a separate solution and only delivered to individual customers on the corporate market by order on payment of a significant start-up charge, was now part of the company's general access network and that it should be within the relevant market for local access provided at a fixed location, Market 3a. In the same way the GPON bitstream solutions that Míla offered on the corporate market were fundamentally the same as those offered to residences, and some of them were called residential connections to companies, and they belonged to the market for central access provided at a fixed location for mass-market products, Market 3b. There was a considerable likelihood that the same or at least analogous competition problems existed with respect to these corporate solutions as were described for the residential connections.

Míla objected to this PTA assessment, as uninvestigated and unfounded. The Ljóslína product was exactly the same as before. It was delivered as a separate solution and on its own against payment of start-up charge. The basis for the product were exactly as before. The change that the PTA considered to have happened, was unfounded and the PTA conclusion therefore wrong. The only arguments appear to be uninvestigated complaints from competitors, and it seemed that they sufficed as a basis for a burdensome PTA decision, contrary to the rule of investigation of the Administrative Procedures Act, which was a fundamental principle in administrative legislation.

Míla pointed out that there was another type of PON topology in what were called commercial areas than in residential areas This was such that a lower splitting ratio was used in such areas than in residential areas, i.e., what is called 1:64 split instead of 1:128 split, which was

generally what was used on the residential market. This meant that it was assumed that much fewer connections would be connected to each PON in such areas than in general residential areas. There was also the fact that commercial areas usually had fewer spaces per square kilometre than residential districts. GPON corporate products had furthermore another service level than residential connections. These were fundamental reasons for varying prices between these areas. Míla cost base for Ljóslína was quite different than for GPON connections Ljóslína cables had been deployed throughout the years as a product where electronic communications companies could order addresses where Míla had not yet deployed fibre-optic. Subsequent to an order having been made, work was commenced on activating a connection with the necessary civil works.

Although Míla had collected part of the costs of the works from the electronic communications company, Míla had absorbed a much larger part itself than is customary, and that had been done because the Ljóslína price was much higher than normal. With this decision, the PTA was spoiling this product and the most likely Míla conclusion would be to stop providing this service. Companies would thus not be able to order fibre-optic addresses where they wished but would rather have to wait until Míla or other parties completed comprehensive fibre-optic rollout to the areas. When that would happen was entirely unclear in the light of the obligations that the PTA planned to impose on Míla. The PTA decision to categorise these connections in the same group as general residential connections was something that Míla strongly rejected, particularly if the PTA intended to assert that this was the same product. The PTA should decide price, but in Míla's opinion, the Administration had no authority to decide Míla's product offer.

The position of the PTA

As has previously been stated, the PTA has withdrawn the intention to categorise Ljóslína to companies as part of Market 3a. The PTA considers there to be no reason for further discussion on the Míla comment at this point in the document, and refers to Appendix C, which discusses the additional consultation where this change was announced.

10.2.6 Cases that the Competition Authority is processing vis-à-vis the Siminn Group

Nova indicated detailed discussion on competition matters which was described in the CA Decision no. 25/2020

The position of the PTA

The PTA refers to the answer here above, where there was discussion on the CA decision in question and the ruling of the Competition Appellate Committee number 1/2020, dated 13 January 2021 Reference is made to this.

10.2.7 Summary and conclusions on competition problems related to Market 3a

Tengir was happy the PTA had conducted such detailed analysis of potential and real competition problems on Market 3a and related markets, and having subsequently identified various entry barriers and serious competition problems that existed on these markets and plans to react to them by prescribing price control, both on Míla's copper and fibre optic local loops, see paragraphs 1245-1252.

The position of the PTA

The Tengir comment supports the discussion and conclusions of the PTA and requires no further discussion. The PTA, however, points out that the Administration had retracted the intention to impose an obligation for cost-oriented tariff on Míla fibre-optic, and prescribed instead an ERT obligation on the Siminn Group. Reference is made to Section 10.7.5 here later, and to Appendix C, which discusses the conclusions of the additional consultation opened by the PTA last 30 October.

Míla referred to paragraph 1247, where it was stated that Míla controlled the only network with national coverage and was at some locations the only party on the market. Despite the fact that in some areas, new network operators had made an entry, Míla remained with a dominant market share at national level. At the inception of competition, Míla had almost exclusively used its copper network, which was upgraded regularly with the newest technology on offer at any given time. In recent times, Míla had increasingly and rapidly developed and purchased fibre-optic networks.

Míla said that once again, the PTA appeared to intend to punish Míla for providing good service and having installed its bitstream system at locations where there was clearly market failure. Something that Míla had considered to be its community duty up to this point in time. It is clear that Míla would need to review this policy if the conclusion of the market analysis was that the company would be punished for providing service in areas where there was market failure. Míla also pointed out that during the lifetime of the analysis, Míla would not have a local loop network with national coverage and the same would probably apply to the bitstream system as the PTA intended to punish Míla for providing service in such areas. Míla objected to there not being a single word on the large market share that GR had in the Capital City Area, where the company in all likelihood, had a significant market share.

The position of the PTA

The PTA does not plan to punish Míla for providing good service and operating an extensive high-speed network. The size of the Míla network is a factor that increases Míla's strength, but it is far from being the only factor on which the PTA bases its assessment of market power. There was previous discussion on whether Míla would control a network with almost national coverage at the end of the period of validity of this analysis, and it is the assessment of the PTA that although Míla may decommission part of its copper network during the period of validity, it will be in a very insignificant proportion of the country where Míla may possibly not have another network in operation during the period in question. The PTA reiterates that

the Administration had retracted the intention to impose an obligation for cost-oriented tariff on Míla fibre-optic and prescribed instead an ERT obligation on the Siminn Group.

Míla referred to paragraph 1252 where it was stated that it was clear in the opinion of the PTA that the various obligations needed to be tightened in an endeavour to prevent or mitigate damaging consequences of the competition problems in question. In the last analysis, the PTA had e.g., imposed price control on Míla copper local loops and not on fibre-optic local loops. Míla had then hardly commenced fibre-optic rollout. During the last years, Míla had been implementing extensive development of fibre-optic networks to residences and companies, which now reached about 80,000 such parties and the company had announced that this development would continue during the lifetime of the analysis. The situation was now that about 30% of Míla's old connections on the relevant market were fibre-optic connections against about 70% on copper, and it was clear that this development would continue during the lifetime of the analysis. This means that the importance of unamended price control diminishes steadily on the relevant market. Given identified and potential competition problems on the relevant market, the PTA considered that it had no option than to prescribe a price control obligation on both Míla copper and fibre-optic local loops.

Míla rejected that "there was a need to tighten obligations". Much of the real cases that the PTA mentioned here, relating to Míla, were either very old, uninvestigated or being processed where a final conclusion had not been reached. Míla considered that such cases cannot be considered a reasonable basis for a significantly burdensome decision such as the PTA announced in this draft. Míla pointed out that only one third of addresses in the country had access to Míla fibre-optic and at the same time that the two thirds remaining were mostly buildings with few dwellings and therefore expensive to develop.

The position of the PTA

The PTA points out that the structure of the market is still such that Míla has the opportunity to leverage its market strength and that of the Siminn Group. The PTA considers that the market has not moved adequately in the direction of effective competition, despite obligations in force, and for this reason that there is a need to consider how one could achieve more competition. Among the measures that the PTA intended to apply for this purpose are increased obligations for access to ducts and conduits. The PTA has on the other hand, taken into consideration the comments regarding the necessity of further development of fibre-optic networks, and has retracted the intention to impose an obligation for cost analysed price on the fibre-optic local loops, and instead to prescribe an ERT obligation on the Siminn Group, which for the time being, should be adequate restraint on the Group's pricing. In this way incentive for development will not be inhibited. Reference is made to further details on this in Appendix C.

Míla refers to the fact that only one third of addresses in the country had access to Míla fibre-optic. This is incorrect because the proportion was that at least 47% of homes and companies in the country had access to Míla fibre-optic at end of year 2020, but as previously stated, that percentage is probably significantly underestimated.

Nova referred to paragraphs 1251 and 1252 and agreed with the PTA assessment that given identified and potential competition problems on the relevant market, the PTA considered that it had no option than to prescribe a price control obligation on both Míla copper and fibre-optic local loops.

The Administration Decision no. 25/2020 on the sale of English football, and other cases that the CA had received for comment, demonstrated without doubt that there was every reason to restrict the Siminn Group, that showed little respect for the rules of the game that had been set for the market. There was every reason therefore to tighten even more, the obligations that applied to the Group.

The position of the PTA

The PTA refers to the reply to the Míla comment here next above. The PTA has also previously answered the Nova comment that relates to the above **specified CA** Decision no. 25/2020 Reference is made to this.

10.3 Obligations in force

No comments were received on this Section.

10.4 Assessment of impact of imposed obligations on Market 4/2008

10.4.1 The necessity to impose and maintain relevant obligations and the impact of the obligations

Tengir was happy the PTA had conducted such detailed analysis of potential and real competition problems on Market 3a and related markets and having subsequently identified various entry barriers and serious competition problems that existed on these markets and planned to react to them by prescribing price control, both on Míla's copper and fibre optic local loops, see paragraph 1282.

The position of the PTA

The Tengir comment supports the discussion and conclusions of the PTA and requires no further discussion. The PTA reminds, however, that after the additional consultation opened on 30 October 2020, the PTA decided to waive the obligation for cost-oriented prices for Mila fibre-optic products, but instead stipulate that the Siminn Group passes the ERT test.

Míla refers to paragraph 1271, where among other things, it is stated that obligations that were imposed in 2014 had ensured continued wholesale access to access networks and related facilities and had brought about a new type of access, i.e., access to fibre-optic local loops. There were on the other hand examples of companies having found it time-consuming to gain access to Míla systems in addition to that which obligations prescribed, and in this connection, reference is made to Míla fibre-optic ducts in Úlfarsfellshverfi.

With respect to the PTA reference to access in Úlfarsársdalur, Míla said that GR had requested P2P access to 3 addresses in Úlfarsársdalur (Sjafnarbrunn 10, Friggjarbrunn 5 and Úlfarsbraut 98) and their place of delivery was to be the telephone exchange in Grafarholt. GR demanded that the charge for the connections should be the same as for GPON local loops. Míla had not considered this GR demand to be normal and reasonable, as it was clear, given these conditions, that there would have been a large loss in providing such access. Míla had also considered that there was no real willingness or need for GR to request this access in the light of the fact that GR already had a duct system in all buildings in the district, and there was nothing to indicate that GR did not intend to use them as actually proved to be the case a few months later. If it had been a normal and fair request, a number of more than 3 local loops would be necessary for the costly changes to Míla systems for it to be financially feasible. Míla had also pointed this out to GR, and that it would have been more normal for GR to have access to the manhole in the district, to minimise Míla costs, as there was not a sufficient quantity of fibre-optic in the telephone exchange in Grafarholt.

A little later, Míla had requested fibre-optic access to GR system for about 10,000 connections in the Capital City Area. Then the reply was received from GR that these were too few connections for it to be worth the effort to make a product for this request. One could however understand the PTA to mean that the Administration thought it was normal that Míla embarked on substantial changes to its own systems at its own cost to provide access to 3 local loops for a competitor The PTA drew the conclusion that this example showed that Míla did not want to take part in business that was not covered by obligations. The truth of the matter was that Míla did not wish to take part in business that clearly did not provide any normal return to the company, which was the way things were in business in general.

The position of the PTA

The PTA will take into account that Míla has provided arguments for the refusal of access in Úlfarsárdalur. The case did not come to the PTA for formal resolution, and it has therefore not been fully investigated. The PTA will therefore delete this reference to this case. That does not change the main force of the paragraph, because there are other examples which have among other things been described in Section 10.2 here above.

Míla referred to paragraph 1275, where it was stated that in accordance with the principle of proportionality, it was normal to assess the necessity to impose the obligations that the PTA planned to impose on Míla. The obligations were conducive to achieving the objectives of the Electronic Communications Act for effective competition and efficient electronic communications. In the light of the competition problems that existed and that are now less than in the last analysis, of the strong position of Míla on the relevant market and of the strong position of the company and of the parent company Siminn, the PTA deemed it necessary to maintain all the above specified obligations on Míla and in fact to add an obligation for price control on the company's fibre-optic local loops in order to support increased competition on the relevant market and on downstream markets, thus assuring consumer interests. In the PTA examination of the relevant market the Administration had come to the conclusion that no other measures could be found that could be as effective in solving the competition problems that existed on the market.

Míla said that it could not see that any actual assessment of the impact of the obligations had taken place in the preliminary draft. The view of the PTA was simply presented, and as it seems an arbitrary decision by the PTA. For other companies, like Míla, i.e., infrastructure companies that significantly invest for the long term, it was fixed costs that was the largest part of the cost. It was therefore clear that the fewer the users in the Míla systems, the less efficient operations would be, and prices would be higher. It was therefore totally unlawful and unreasonable of the PTA, and contrary to the objectives of the Competition Act for efficient use of production resources, and contrary to the objectives of the Electronic Communications Act for secure and efficient electronic communications, to force the Míla market share down "manually", as the PTA seemed to consider its duty to be.

For utilities that invest in systems with repayment over a 30–40-year period, it would represent a significant change to lose about 40% market share in about 10-13 years, as has happened. Despite this, the PTA considered there to be a need to force the Míla market share down below the 50% level. Míla pointed out that other infrastructure companies, e.g., in distribution of electricity and water, had a monopoly in their operating territories and thus achieved 100% usage of their investments. It was clear that in the coming years, Míla needed either to renew its cables with fibre-optic or reduce the size of its service area with decommissioning copper, without developing a fibre-optic network. With this market analysis, things were developing towards Míla needing to choose the latter option or to seek funds from end users, municipalities and the state. These networks would otherwise not be built in the countryside by Míla, which is however the company that had most infrastructure in these areas and was in the best position to build new systems in as efficient manner as possible.

The position of the PTA

The PTA considers that it has provided adequate arguments for continuing and to some extent increasing obligations in order to support efficient competition on Market 3a and on downstream markets and rejects that there was an arbitrary decision or that an adequate assessment had not been made of the impact of the obligations that the PTA plans to impose. The PTA is not manually forcing down Míla's market share. The objective is to increase competition, and it is likely that competition will not be fully effective while Míla has such a high market share as is the case. It is clearly not possible to compare Míla with distribution utilities on the energy market, as another kind of legislation applies that authorises monopoly of distribution.

The PTA considers that by retracting an obligation for cost analysed prices on Míla fibre-optic local loops, adequate concessions have been made to the company's needs, in connection with renewal of its access network, at the same time as there will be restraint on pricing within the Siminn Group with the imposition of an ERT obligation. The ERT obligation will be explained in more detail, and its probable impact, in Sections 10.7.2 and 10.7.5 in the revised analysis (Appendix A), in the same Sections here later and in Section 4 of Appendix C.

The PTA finally considers that there is an interesting assertion in Míla's final words in the above specified comment, to the effect that Míla is in the best position to build new systems

in the countryside in the most efficient manner. The PTA considers that this supports the conclusion of the Administration, that Míla has SMP on the relevant wholesale markets and is in a very strong position, not least in the countryside.

Míla refers to paragraph 1276 where it is stated that the obligation for wholesale access was a pre-requisite for competition to become effective in related service markets such as on the broadband market and the fixed line telephone market.

Míla said that here once again, local loop networks and bitstream networks were being mixed together and the cost for a local loop network used to impose obligations on the Míla bitstream network. The PTA considered that Míla market power was too great and wish to reduce it. On the other hand, Míla was not allowed to withdraw service at locations where it did not pay according to this. Locations that had been developed when a totally different situation had pertained on the market and where Míla had been able to get fair return for its investment. This also meant that Míla could not stop offering service on other parties' networks, even if Míla had its own fibre-optic that cost less. This meant that Míla could not stop providing service, even if the service provider increased its price as it wished. Míla needed to absorb additional costs and to collect single price, despite the fact that the underlying price of the service provider was much higher than the price of others. Míla considered this obligation had no authority in law and was in direct contradiction with the basic principle of freedom of contract and was clearly at variance with the rule of legality in the Administrative Procedures Act. The PTA deemed this to be an insignificant burden on Míla, but had not presented any arguments for this conclusion, nor endeavoured to assess what it really entailed.

The position of the PTA

The PTA is not mixing together access to local loop networks and bitstream networks. It is however true that the final point in the paragraph applies to obligations on 3b. It will be deleted at this place in the document, and this issue is covered in the discussion on obligations on Market 3b in Section 11 in upgraded initial draft market analysis (Appendix A).

Míla referred to paragraph 1282, where it was stated that on the basis of the very many identified competition problems, some of which related to Míla pricing on the relevant markets, the PTA considered it unavoidable to impose price control obligations on Míla fibre-optic local loops in this instance. The price control obligation in question was to ensure that Míla enjoyed a normal profit from the fibre-optic local loops in question and to ensure more efficient operations on the local loop network and to lead to a normal composition of prices and profit at wholesale and retail level for the Group. Despite the fact that this would constitute inconvenience for Míla, the PTA considered the obligation in question to be necessary to strengthen competition on the relevant market and on downstream markets. The main reason why a price control obligation had not been imposed on Míla fibre-optic local loops and 2014 was that Míla fibre-optic rollout had just recently commenced, and it was not thought to be appropriate to impose obligations on the deployment of fibre-optic local loops to households and companies during such a development phase. These grounds no longer applied as almost all households and companies now had the option of a fibre-optic local loop in this country and it was expected that their deployment would continue for the duration of

the analysis if competition on the relevant market and on the downstream wholesale Market 3b could flourish.

Míla stated that the company still had to deploy fibre-optic to about 50,000 homes and about 10,000-15,000 companies in the country. These were the homes and companies that were most expensive for development, many times more expensive than those to which Míla had already deployed fibre-optic. If this obligation were imposed, Míla would stop development at all locations that were more expensive than the average price of existing local loops. The company could not do otherwise, as it would otherwise not be competitive in existing competitive areas.

The position of the PTA

In the light of the comments submitted here, the PTA has retracted the intention to impose an obligation for cost analysed prices on Míla fibre-optic local loops and plans instead to apply an ERT test, as Míla proposed in its comments. The PTA accepted the arguments that there was still a need to have latitude in pricing, in order to support development and that it was in accordance with the Commission recommendation number 2013/466/EU to apply an ERT test. There will be more detailed discussion on this issue in the appropriate place in Sections 10.7.2 and 10.7.5 in this document, in the same Sections in the revised analysis (Appendix A) and in Section 4 of Appendix C. The PTA will update the paragraph in question in the revised preliminary draft (Appendix A), taking this into account.

Mila referred to paragraph 1283 where it was said that the PTA considered the obligation for price control and for making a cost model to be somewhat burdensome and that it entailed costs both for Míla and for the PTA to comply with it, particularly as Míla fibre-optic local loops were now an addition. The PTA considered that the obligation for price control and for the cost model would lead to more economical operations on the local loop network and a normal price composition between wholesale and retail parts within the Siminn Group, which in the long run would lead to lower prices to consumers and lower prices for service based on local loop leasing if competition could flourish. The PTA considered that the obligation would not reduce Míla's possibilities of enjoying normal profit from operating local loops and related facilities. Míla had previously made such a model for another of the company's regulated services, so Míla had experience of such work. The making of such a model for Míla fibre-optic groups was now added.

Míla said that it was not only the making of the cost model that was burdensome for Míla. Even more burdensome was having to have the same price across the whole country and also that the time that the PTA took to scrutinise the cost analysis was far too long, even more than a year, which was totally out of all proportion.

The position of the PTA

The PTA refers to answers to the comment on 1282 here above. There will be more detailed discussion on obligations in Section 10.7.5 in this document, in Section 10.7.5 in the revised analysis (Appendix A) and in Appendix C. The PTA will update the paragraph in question, taking this into account.

The PTA endeavours to complete scrutiny of the cost analysis as quickly as possible. It does happen that such scrutiny takes a longer time than is desirable, and there can be various reasons behind this, such as the level of complexity of the analysis and lack of information.

Míla referred to paragraph 1285 where it was stated that the obligations that were imposed on Míla in the last market analysis of the relevant market in 2014 had not inhibited development of fibre-optic networks, which now cover something over 80% of households and companies in the country. The PTA considered that this would continue to be the case, despite the fact that a new price control obligation was imposed on Míla fibre-optic, as pricing of access to copper and fibre-optic local loops would be based on cost and allowance would be made for normal return on investments. Cost control on local loops should thus not inhibit willingness to invest, whether in the Míla local loop network or in those of potential competitors. Price control had not been imposed on Míla fibre-optic in the last cost analysis and investment in fibre-optic local loops had been substantial from that time. In the opinion of the PTA, this latitude ("regulatory holiday") returned good results in developing high-speed access networks, but now the time had come, on the basis of the above specified competition problems, to better assure competition on the relevant market and on downstream markets, regardless of whether it took place on copper or fibre-optic networks.

Míla said that it was not correct to maintain that the current obligations had not had an impact on Míla development with reference to the development of parties other than Míla, as Míla development reached only half of homes/companies in the country and 25,000 of 88,000 addresses in the country. It was clear that the planned single price obligation would have a significant and negative impact on Míla development plans.

Míla pointed out that the concept "regulatory holiday" had never arisen in connection with the market analysis that was now in force. In that decision, it had been clearly stated that there was no price control obligation on fibre-optic local loops, and the PTA had always asserted that it was entirely up to Míla to decide its tariff for fibre-optic local loops. The PTA had for example asserted in a report to the Appellate Committee for Electronic Communications and Postal Affairs, in connection with a Míla appeal of Decision 40/2014 on the universal services obligation on Míla, that Míla controlled its tariff for fibre-optic local loops, and there it is stated among other things:

"It is however problematic for the PTA to publish such calculations, as it is in the remit of Mila ehf to price the service, and in addition to this there is no price obligation on fibre optic local loops on the local loop market (then M4), pursuant to Decision no. 21/2014. In the opinion of the PTA, it would have been absolutely inadmissible for Mila ehf. to be able to base its pricing on figures from the PTA, e.g., on what the monthly user charge should be, or what proportion of revenue sharing the company should require in its potential negotiations with service providers. In other words, the company could say to users and service providers: The PTA says that this should not cost so much."

Then the following is also stated in the report:

"It is appropriate to emphasise the important criterion named here above. In the first elaboration of obligations on the local loop market (M4), no price control obligation was imposed on Mila ehf. with respect to pricing of fibre-optic local loops. Mila thus has full authority to price the local loop charge for such local loops, taking into account recovery of investment and operational costs on the basis of the criteria set by the PTA... Pursuant to the above, it is therefore denied that there was a

lack of arguments in the appealed decision. It was noted that the reference was expected revenue based on the useful life (depreciation period) of fibre-optic local loops, which was 25-30 years. Míla is on the other hand, authorised to adjust its pricing to account for recouping of investment and operational costs..."

Investment decisions aimed at collecting a higher charge for fibre-optic local loops in the countryside and thus being able to invest more than otherwise. In the case of decisions on investments for about 40 years (not 25-30 as stated by the PTA) there had to be a level of certainty that the decisions the Administration made did not destroy the grounds for investments. It was therefore particularly serious in the opinion Míla, that the Administration should decide that there should be single price for fibre-optic and copper local loops, that would have the impact that Míla grounds for pricing in the countryside and in the Capital City Area were broken. Míla considered this to be the equivalent of confiscation of assets by the PTA.

The position of the PTA

The PTA considers that the main reason for Míla having fewer fibre-optic local loops than GR, is that Mila started fibre-optic rollout many years after GR. The PTA considers obligations pursuant to the Electronic Communications Act not to be the reason for this development, but rather a commercial decision by the Siminn Group to concentrate in the first instance on upgrading technical solutions on its copper network. The PTA wishes to note the last round of market analysis on the relevant markets did not constitute any promise that price control would never be applied to Mila fibre-optic local loop network. The PTA considers that it should be assessed in the light of circumstances in each instance and of identified competition problems, whether there is reason to apply an obligation for cost analysed prices on fibre-optic local loops and to weigh and assess the need for such an obligation to activate competition on the one hand and to support investments on the other. After having examined the comments of the Siminn Group, subsequent to consultation on the preliminary draft, the PTA has made the assessment that it is more appropriate to apply an obligation for an ERT test rather than an obligation for cost analysed prices, and refers to discussion here above in Section 10.7.5 in this regard in the revised preliminary draft (Appendix A) and to Appendix C. The PTA will revise the text of the paragraph in question in the preliminary draft.

Míla referred to paragraph 1286, where it was stated that the burden caused by the obligations on Míla should not decide whether they are imposed or not. In the opinion of the PTA, the above specified obligations were normal and necessary to support effective competition on the relevant market and on downstream markets, and should not be considered unnecessarily burdensome, given their importance in strengthening competition on the markets in question. The PTA considered obligations to be in the interests of competition in the long term and that they were conducive to increasing service offers and consumer choice on the electronic communications market as a whole.

Míla stated that pursuant to EU rules, obligations should not inhibit the development of next generation networks, in this instance fibre-optic. These obligations would do that and were contrary to the declared policy of the government and of the electronic communications regulatory framework in Europe.

The position of the PTA

The PTA pointed out that subsequent to the Administration retracting its intention to impose an obligation for cost analysis of fibre-optic local loops, the obligations are not much more burdensome than the obligations that have applied in the past years, and they have not prevented acceptable performance from Míla operations. Latitude in pricing access to fibre-optic local loops will give Míla the option of increasing distribution of its fibre-optic network and further elaboration of the obligation for access to ducts and conduits will give other companies increased opportunities to develop a fibre-optic network. The obligations that the PTA plans to impose will therefore not inhibit developing of next generation networks.

10.5 Imposition of obligations pursuant to the Electronic Communications Act

No comments were received on this section.

10.6 Obligations that vary by geographic area

10.6.1 The PTA conclusion with respect to varying obligations on the relevant market

Míla noted that the PTA proposed lifting of obligations in specific municipalities, among other things with respect to advertising civil works. The obligations proposed by the PTA in the preliminary assessment to be lifted should however be such that they are of little importance, if any, as they covered areas where development by competitors was in fact completed, and as such this listing was a kind of "show".

The position of the PTA

As is stated in paragraph 1295 in the preliminary draft, the PTA did not consider it justifiable to take large steps in this instance when elaborating various obligations by area, among other things in the light of indications discussed in Section 10.2 of competition problems, including alleged damaging pricing policy of the Siminn Group. The PTA considered among other things that it was not possible to prescribe varying forms of obligations for price control on Míla. Although the PTA had decided not to change the obligations that shall vary between areas, one must nevertheless mention that the PTA has decided to retract its intention to impose an obligation for cost analysed price on Míla fibre-optic, and that was the obligation that the Siminn Group was most dissatisfied with and was related in one way or another to most comments from the Group. The PTA decided instead to impose an ERT obligation on the Group, which the PTA now considers after due consideration to be the most appropriate in accordance with proportionality based on the competitive conditions today and the likely development over the duration of the lifetime of the analysis. The PTA considers that the ERT obligation in question is adequate to impose limitations on the Group's pricing, while ensuring adequate latitude for the Group in pricing and which should not inhibit Míla's willingness to invest.

The PTA does not however agree with the Míla position that the access obligations that the PTA intends not to impose on Míla on the relevant wholesale markets in areas where there is more competition, are of little consequence, or are a "show". They include access to ducts and conduits, duty to advertise civil works and notice for notification of the decommissioning of electronic communications networks. It is clear that the obligation of access to ducts and conduits calls for a significant amount of work and management by Míla, and one must therefore consider that it is beneficial for Míla to only need to manage the information that relates to about 30% of homes, instead of having to handle provision of information for all homes in the country. Míla has also complained about the obligation for the duty to advertise company civil works and therefore this obligation should be much less burdensome for the company than has been the case up to this point in time. There is also a certain economy in not needing to be subject to burdensome obligations in large areas with respect to the decommissioning of the company's copper system.

Then one can mention that in the additional consultation opened by the PTA on 30 October 2020, the Administration announced the slackening of some of the criteria that decided demarcation of areas where there was more competition and thus lighter obligations. This meant that the municipalities included there, increased significantly and now the situation is that municipalities where approximately 70% of the country's inhabitants live, are subject to lighter obligations.

Míla referred to Section 6.5.2 in the AM report, which discussed the nature of the varying obligations that the PTA planned to impose on Míla.

In the opinion of AM, the variety in the obligations that the PTA proposed for specific areas was little when it came to FTTH, which was the most important part of the market. As is stated in paragraph 1296, the PTA planned to leave out 3 obligations on Market 3a in the relevant areas, i.e., 1) access to ducts and conduits, 2) duty to advertise civil works and 3), 5-year notice to notify migration between electronic communications systems.

In other EU states, there was a significant difference in obligations with respect to FTTH, between competitive areas and areas where there was little or no competition, see e.g., Spain and Italy.

In 2016 the CNMC had completed market analysis of Markets 3a and 3b.

The NRA had segmented 66 municipalities (35% of inhabitants) on Market 3a where competition had been considered to be in place between next generation networks. In those areas, Telefonica only needed to provide access to copper network and physical infrastructure, but not to fibre-optic networks. In areas with less competition, the company needed to provide virtual access to fibre-optic (NEBA local). The prices for that access should be based on an Economic Replicability Test-ERT.

On Market 3b, CNMC had segmented 758 telephone exchanges (60% of total copper local loops) which should belong to competitive areas. There the Administration had lifted an access obligation for bitstream access over copper and fibre-optic. In areas with less competition (8000 telephone exchanges) Telefonica was obliged to offer access to both its

copper and fibre-optic networks. In addition, the company was obliged to offer bitstream access to its copper and fibre-optic networks across the whole country.

In 2020, CNMC announced new plans for the markets in question. If the Administration applied the same criteria as last time, municipalities on Market 3a where competition was deemed to be effective, would increase from 66 to 250. If two electronic communications companies that jointly invested in the same fibre-optic network were considered as two companies that distributed next generation networks, then there would be 370 municipalities. Telefonica was arguing that only one competitor that distributed a next generation network was sufficient for it to be deemed that there was competition. If this was accepted, the municipalities would then become 540. This could lead to 60-75% of the Spanish nation belonging to the same competition area, where access to fibre-optic would not be subject to obligations. The fibre-optic market could be segmented, where the Telefonica market share was only about 40% on the residential market, and 70% on the corporate market.

AM noted that in Italy, AGCOM had segmented Milan as a separate geographic market as no company was considered to have SMP and where competition was thus effective.

The rest of Italy had been defined as a separate geographic market. AGCOM had identified varying competitive conditions that had been reflected in the elaboration of price control obligations. The first indication was that at least two competitors operated a fibre-optic network (FTTH or FTTC) which reached at least 60% distribution in a specific area and which reached a total of 75% of homes in the area in question. Another indication was that the TIM retail department had 40% or less. The third indication was that active TIM wholesale service (VULA and bitstream) was less than 80% in the relevant area.

The conclusion had been the 26 municipalities had been defined as areas where there were varying competitive conditions within this geographic market (the rest of Italy). The list was updated annually. Varying obligations should be in force within these municipalities when compared with other municipalities in this geographic market. Price obligations should apply within the municipalities that did not belong to these 26 municipalities (which could potentially be more in the future). Price control obligations should on the other hand not apply to bitstream services on Market 3b within the municipalities in question. Within the municipalities in question, TIM could also make an agreement on lower VULA price on Market 3a than specified by BULRIC. In those instances, TIM should notify AGCOM of such lower prices within 30 days, along with data and arguments that would enable AGCOM to assess whether they were financially sustainable.

The position of the PTA

The PTA refers to previous reply above. The Administration however notes that AM assumes in its comments that there is a separate market for fibre-optic in this country, but as has repeatedly been stated by the PTA here earlier in this document, as well as in Sections 3 and 4 in the revised initial draft market analysis (Appendix A) and in Sections 2 and 3 in Appendix C, the PTA considers that there is still substitutability between copper and fibre-optic networks in this country and that this will be the case throughout the lifetime of the analysis. Reference is made to this discussion.

Although one can certainly agree with AM that states can be found in Europe where there has been a greater difference in obligations between areas, the PTA considered on the basis of identified competitive conditions and identified competition problem in this country, that there was no reason for greater slackening in this connection, for the time being. The PTA considers it most important that the Administration has abandoned its plans to stipulate an obligation for cost-analysed prices for Mila fiber-optic products throughout the country, and instead stipulates that the Siminn Group passes the ERT test. In a special decision later in the year 2021, the PTA will then implement that test, e.g., whether it will make geographical segmentation possible. Apart from that, the Spanish example referenced by AM, refers to Market 3b and not to Market 3a The Italian example is furthermore such that there need to be at least 3 networks to justify segmented geographic markets on Markets 3a and 3b. The PTA has also announced the change where the list of areas where there is more competition, and thus lighter obligations, will be updated annually.

Míla commented on paragraph 1295 in the preliminary draft, where it is stated that on the basis of the PTA analysis of geographic market, the PTA did not consider it to be justifiable to take a large step at this point in time when elaborating varying obligations for the two areas that the PTA had selected for further analysis. Given the indications described in the Section on competition problems with regards to alleged damaging pricing policy of the Siminn Group, the PTA considered it not possible to prescribe varying obligations on price control for Míla.

Míla strongly objected to an uninvestigated case where the PTA had not even bothered to get Míla's opinion on the circumstances of the case, should be used as a basis for the Administration's decision making on an intervention of such significance in Míla operations as the planned intervention was.

The position of the PTA

PTA has in Section 10.2 here above, answered a similar comment from Míla and reference is made to that. The PTA further reminds that the PTA has retracted its intention to prescribe an obligation for cost analysed prices for Míla fibre-optic, and that was the obligation that the Siminn Group was most dissatisfied with.

Míla commented on paragraph 1296 in the preliminary draft, where it was stated that the PTA considered it possible to lift 3 obligations that related to an access obligation in this instance in the 6 areas that the PTA defined as being areas with more competition. The obligations in question and that would therefore not apply to Míla in those municipalities were 1) access to ducts and conduits 2) Míla duty to advertise regarding civil works and 3) the rule on 5 years notice to inform about network system migration.

Míla pointed out that according to the Code, which would probably become law before this market analysis came into force, then the same or comparable provisions as the first two obligations could be found there. This meant that lifting them was in fact of little value. The third obligation was very burdensome, but it had not been tested to any extent, as Míla had not yet decommissioned its copper network, at least not where active connections were in place. As Míla valued its reputation and its customers, it was likely that lifting these

obligations would in actual fact have little impact, except in saving Míla having to send in a formal notification of decommissioning to the PTA for these areas. Míla considered that this lifting of obligations mattered little for the company and in no way weighed up against plans to impose a nationwide price control obligation on the company.

The position of the PTA

The PTA states first that the Code had neither been adopted in the EEA agreement and nor had it become law in Iceland. The PTA expects however, that the bill for a new Electronic Communications Act, based on the Code, would be agreed in the Althingi during the lifetime of the analysis. It was however difficult to predict with any certainty when that would be exactly.

It is unclear what Míla means by the same or comparable provisions as the first two obligations can be found in the Code which means that their lifting has in reality little value, as Míla does not refer to specific provisions of the Code in this connection. The PTA cannot see better than that it would be optional according to the Code to apply obligations similar to those referred to, and that it has real significance to prescribe geographic application of them in the planned decision on obligations.

Míla admits that the third obligation was very burdensome and that it has not been tested to any extent, as Míla had still not decommissioned its copper network. As stated elsewhere in Míla comments, the intention is for Míla to decommission its copper network over the next 10 years. It is therefore clear in the opinion of the PTA that slackening of these obligations where about 70% of the population lives, is significantly beneficial for Míla.

Míla finally states that slackening of these 3 obligations would in no way weigh up against the PTA plans to impose a nationwide price obligation on the company. The PTA reminds once again that the PTA has offered to retract its intention to impose the obligation in question on Míla and to prescribe instead an ERT obligation on the Siminn Group, which is a lighter obligation and gives the Group more latitude in pricing but nevertheless applies a certain restraint on the Group's pricing.

10.7 Imposition and maintaining obligations

Siminn said it did not see problems on the retail market that obligations on Míla were intended to resolve. The main problem was investment in fibre-optic systems, in smaller communities. If the problem was distribution costs between regions, then Siminn pointed out that this cost belonged to another market. Siminn considered that the planned obligations would not have any positive impact and were rather conducive to reducing competition. They prevented companies such as Vodafone or Nova being able to fully use their countervailing buying power in the relevant area. Competitive restraint against GR and Tengir would be less and their share would continue to increase, which made it possible for them to increase their prices in the long term. Tengir had for example threatened to close access for Míla to its systems, which was a realistic threat as Míla did not have a comparable fibre-optic system to move its service to. Given circumstances in Akureyri, it was not likely that Míla would be

able to deploy fibre-optic in Akureyri to react to such measures within a reasonable period of time.

The position of the PTA

The PTA has described the problems on the retail market in sections 3 and 6 of the preliminary draft market analysis and here above in sections 3 and 6. Although there are more companies than Siminn on the market, they are few, and the concentration coefficient is high. Open access to wholesale service at fair terms is the prerequisite for competition being able to flourish on the retail market. As Míla is a company with SMP on Markets 3a and 3b, there is a particular need for competitive restraint against Míla, rather than against GR and Tengir. It has not been notified that Tengir refused access to its network and the PTA considers it not realistic to expect that the risk of such refusal would increase if obligations on Míla were retained, and it is difficult to see a connection between them. The PTA also points out that Tengir has long requested that Siminn purchase bitstream services from the company, but negotiations have not progressed so far. Siminn therefore has more advantages than shopping for bitstream services in the area of Mila, cf. Siminn's agreement with GR from July 2020.

Siminn pointed out that where Míla was the only party in the area, PTA obligations were conducive to maintaining the current situation and made no difference with regards to development and service for the municipality in question. Míla also considered that an obligation for single price on investments prevented investments as it was likely that such investments would damage competitiveness in other market areas where competitive conditions were different. It would not be possible to price the service in the area in question, except at below cost resulting from the investment. Such obligations could thus have a significantly negative impact on inhabitants of the market area in question and would result in fibre-optic rollout never being implemented, except with the involvement of a public body. The obligations would therefore both increase the need for state aid and delay potential development in the area, to the detriment of inhabitants and the public. Siminn considered that the PTA had not assessed the likely consequences of the setting of obligations, particularly for areas like East Iceland, where fibre-optic investments lagged significantly behind other geographical areas.

The position of the PTA

As has been previously stated, the PTA retracted its intention to impose an obligation for cost analysed tariff on Míla fibre-optic local loops and prescribed instead an ERT obligation on the Siminn Group, which provides it with additional latitude in pricing but nevertheless exerts a certain restraint. The PTA has thus made concessions to the views of Míla and Siminn with respect to the issues that were presented in this Siminn comment.

10.7.1 Obligation to provide access

Siminn pointed out that a prerequisite for authority to impose an access obligation was that such access was "necessary to provide competition in service" see item 19 in the preamble to the Directive no. 19/2002/EU. Siminn pointed out that access to xDSL or GPON local loops or Míla bitstream service in the Tengir or GR operational territories was clearly not necessary,

or in those areas where other parties had already deployed a local fibre-optic network. Against this, access to the Tengir and GR systems was on the other hand necessary as they had a significantly larger fibre-optic system than Míla.

A party that intended to develop wireless Internet service, would today never choose to offer service over anything other than fibre-optic. It seemed furthermore that access to Míla xDSL systems was not necessary to offer Internet service, as Nova had begun to offer 5G Internet service in the Westman Islands, which has greater capacity than Míla xDSL service. This assessment could be different where no party had developed a system in competition with Míla and where that was unlikely to change, particularly where no fibre-optic development had taken place. In any event it was clear that the obligation for access would only be imposed if such access was "necessary".

The position of the PTA

The PTA has assessed competition problems that can result from a strong position and vertical integration of the Siminn Group. Among the problems that could arise as a result of vertical integration of a party with market dominance is that it denies competitors access to wholesale service or practises discrimination. Siminn has a very high market share on the retail market, and this can lead to Míla not endeavouring to provide other companies with access to its network if obligations, e.g., access obligations, do not exist. It is therefore not enough to enable effective competition that competitors on downstream markets have one other potential supplier at wholesale level in certain areas. But more obvious is the need for access obligation in those areas where Míla owns or operates the only fixed line access network.

The PTA then reiterates that competitive conditions in this country do not differ sufficiently between areas to justify segmented geographic markets, whether that is in the operational territory of GR or of Tengir. The PTA also considers there to be no reason to apply varying obligations in such a manner that a general access obligation does not apply in areas where there is more competition. If an access obligation is not imposed, other obligations such as non-discrimination obligation, transparency obligation or price control do not have any meaning. The PTA plans on the other hand to slacken specific parts of the access obligation in the area where there is more competition, among other things with respect to access to Míla ducts and conduits.

With respect to 5G service, Nova refers to prior discussion on lack of substitutability.

Siminn considered that if obligations were imposed for access to Míla, it is obvious that such obligations would also have to be imposed on others, or there was a danger that there would be no competitive restraint, which would lead to Tengir or GR being able to behave as though they were in a monopoly position. The PTA had to be careful about this risk.

The position of the PTA

The PTA is not authorised to impose obligations on a company that does not have SMP.

Siminn pointed out that in the GR territory, access to Míla systems was not necessary to provide service and the performance of Nova proved that this was not necessary. In the opinion of Siminn, access to the GR system was in the long term necessary as the Míla system only reached a fraction of the GR system. If Míla were for example to close access to parties other than Siminn to its system in the GR territory, then other parties would move the rest of the custom to GR, such that GR would profit and Míla would lose, and the Siminn Group would have less revenue in the long term. This was thus not a realistic or likely measure.

The investigation that the PTA needed to make was to assess whether Míla could meet demand, or whether it was likely that other parties would move from GR to Míla if the price were to increase by about 5-10%. Siminn considered it unlikely that the answer to that question was yes, as GR had fibre-optic in the area which Míla did not. In the opinion of Siminn this confirms that Míla was not a necessary business partner in the area, but GR was.

Obligations should be directed at the proper party. For a party that offered wholesale Internet service, obligations on a party that had a smaller market share and did not offer the same supply of fibre-optic, had limited significance. So Siminn could not see that PTA, obligations would lead to it being likely that Nova moved its custom to Míla. Siminn considered that there was no likelihood that this would happen, first and foremost for the reason that the GR fibre-optic system had more distribution and was more contiguous than the Míla fibre-optic system.

The position of the PTA

The PTA refers to prior answers in this section with respect to the necessity to ensure access to the Míla network, despite the fact that another network is available in the relevant area. The PTA points out that there had been significant effort in the development of Míla fibre-optic network in areas where another network is in place and that network had become a comparable option in the GR market territory or will soon be, and in addition to this, the PTA had come to the conclusion that the Míla VDSL system was a substitute product. The PTA reiterated that the Administration could not impose obligations on GR, as that company did not have SMP on the relevant market.

Siminn pointed out that in the Tengir territory, the difference between the Tengir system and Míla was even greater as the Míla fibre-optic was only a fraction of that offered by Tengir. There was thus even more likelihood that the Tengir system was necessary. The question was whether Míla could, within a reasonable timeframe, meet increased demand if Tengir were to increase its price and the answer to that question was negative, as Míla had nothing like a comparable quantity of fibre-optic connections in the area. This indicated that Míla was not a necessary party to be in business with and if access obligation should be imposed, then that should be on Tengir and not on Míla. With respect to Siminn, it was much more important to have access to the Tengir local loops in the area than Míla local loops.

The position of the PTA

Once again, the PTA points out that the geographic market for 3a and 3b is the whole country, and therefore not possible to designate Tengir as having SMP and impose access obligations on the company. The company only had about 6% market share nationally at end of 2020. In

addition to that there is a negligible risk of a company like Tengir, which only operates access connections, should deny access to its only sales product.

The PTA points out that in the Tengir market territory, Siminn has a very high market share in most areas and a large part of users still use Míla VDSL connections which reach most users in the area. Míla has been deploying its own fibre-optic in the area and the PTA expects this trend to continue. The fact that Míla has a network that reaches all users in the area and can offer some of them fibre-optic, and others a substitute product, such as VDSL, there is every reason to impose an access obligation on the company in the light of its market power, and in the light of Siminn market power on the retail market.

Siminn says that for the company it was much more important to have access to the Tengir local loops in the area than Míla local loops. The PTA wonders why Siminn has not already made an agreement on bitstream access with Tengir, and Tengir has for a long time, offered Siminn such access without success. The competition problems that have been identified in the Tengir operational territory, for example in Húsavík, have among other things resulted from a lack of such access for Tengir to Siminn customers. Siminn has only used the Míla bitstream system in that area.

Siminn mentioned that with respect to areas where Míla was the only party that offered service through local loops, it could be that access to the Míla system was necessary to offer service. On the other hand, one needed to examine the relevant areas and identify whether fibre-optic would be deployed in the area or whether 5G Internet service would be on offer. Obligations on cost analysis could also lead to new parties having less incentive to compete with Míla.

What was remarkable was that GR says that it intends to reach 90% of households in the country during the next 2-3 years, which means that at those locations where Míla was the only party with a network, there was a likelihood that GR would begin fibre-optic rollout. This issue has not been investigated in the PTA analysis, and it has huge significance for obligations in areas where fibre-optic is not been deployed. The PTA needed to define in reality, what would be the likely development in the next years outside the territories of GR and Tengir, before obligations were imposed. Access obligations needed to be examined with respect to what parties were deploying fibre-optic, where Míla was already in place, and where Míla would probably be the only party to offer service during the next 2-3 years.

The position of the PTA

The PTA has called for information from electronic communications companies on development plans of fibre-optic networks during the coming years. Information received has not been clear enough for it to be possible to determine exactly in which areas fibre-optic would be deployed during the period of validity of this analysis. The distribution plans that the PTA initially received from GR were not realistic, and it is now clear that the estimated distribution will be much more modest than the previous plans from the company were. The PTA expects that fibre-optic networks of parties other than Míla at the end of 2023 will together reach about [...]% of homes and companies in the country on the basis of information received by the PTA. In addition to this, the PTA considers there to be every need for an

access obligation to the Míla network, even if fibre-optic rollout commences in the relevant area during the lifetime of the analysis, as experience shows that VDSL service is still in use today to a significant extent, a number of years after fibre-optic rollout commenced in specific areas.

With respect to distribution of 5G, there is the same problem with respect to distribution plans, they are unclear and subject to various imponderables. In addition to this, the PTA refers to prior discussion on its conclusion that 5G service was not part of the relevant market during the period of validity of this analysis.

Siminn pointed out that the PTA had needed to analyse Nova plans and possibly those of other parties with respect to 5G development outside the GR area, as that company had begun to offer 5G service in Westman Islands to replace Internet service over a fixed line. This had potentially great significance and required investigation.

The position of the PTA

The PTA called for plans from mobile network operators, including Siminn, on development of 5G mobile networks, but all of the companies describe very unclear plans that are subject to considerable uncertainty. In an email from Nova to the PTA dated 22 October 2020, it was stated that the company had [...] 4G and 5G subscriptions in the Westman Islands, which is not a high proportion of connectable properties in that town. The Westman Islands town has recently announced that the town intends to support fibre-optic rollout in the town in the near future, and in February 2021 Mila announced that the company will begin fibre-optic development in the town in 2021. The PTA also refers to prior discussion on potential substitutability of 5G service.

Tengir says that it supports the PTA plans for the imposition of wider obligations on Míla, among other things with respect to information on Míla duct systems, increased access to ducts and to information on planned civil works. It was the assessment of Tengir, that these obligations would support economies in building high-speed electronic communications networks, for the benefit of consumers.

According to this, Tengir could request a database from Míla on broadband ducts that Míla had deployed into some properties in Akureyri but had never used. Tengir had not been authorised to use these ducts to lead a fibre-optic cable into its customers, despite requests to this effect from customers. In some instances, customers endeavoured to own these pipes themselves (had for example acquired them during civil works and laid them themselves) and only wished to receive fibre-optic through these ducts. Given this issue, then the situation had changed in this respect such that if customers had ducts owned or from Míla out of the property, Tengir could receive permission from Míla to use the duct for a fibre-optic cable to the customer if he so requested. If agreement was not reached about deploying fibres through empty ducts or cable lines against a reasonable charge, Tengir would like to have clear conditions with respect to whether Míla was obliged according to this item to provide Tengir with the opportunity to implement the project itself, and whether such access would be free of cost.

The position of the PTA

The access obligation that it is planned to impose on Míla, which among other things relates to provision of information on cable lines and access to ducts, has the objective of supporting wider and more rapid development of high-speed networks in accordance with the considerations referred to by Tengir. When on the other hand, it is a question of the legal position of electronic communications companies with respect to such access, the Tengir understanding is not entirely correct. Ducts and conduits laid by electronic communications companies in real estate plots are not the property of the owner of the building, but such electronic communications infrastructure is part of the general electronic communications network of electronic communications companies. Then it is clearly stated in article 60 of the Electronic Communications Act that the responsibility and ownership of property owners of electronic communications conduits commences at the demarcation box which is the electronic communications access point to the property. The electronic communications conduits that are inside of the demarcation box are called in-house electronic communications wiring, but outside the electronic communications access point at the demarcation box, are local loops and ducts owned by electronic communications companies. It is therefore not in the hands of property owners to make a decision on access to ducts that an electronic communications company has laid in the building plots of properties.

There is on the other hand the case where the property owner may in some instances have made the decision to pay all costs for the ducts in the plot of his building for potential future use for electronic communications connections or for other kinds of connections. Such ducts are not subject to access obligations on the basis of market analysis and are the property owner and in such instances, it is authorised to provide access to any party whatsoever to such a duct, without the involvement of an electronic communications company that has been designated as having SMP.

Tengir asks whether Míla is obliged to provide Tengir with the opportunity of installing fibre in a free Míla duct or conduit if agreement is not reached on costs if Míla implements this, or whether such access would then be without cost.

According to paragraphs 1471 and 1472 in the preliminary draft, it is stated that Míla shall cost analyse access to such company infrastructure. Such cost analysis is now being processed by the PTA and it is expected that a decision on this will be available later in 2021, subsequent to national consultation and consultation with ESA. It is therefore clear that the party requesting access is obliged to pay Míla a reasonable charge for such access.

Tengir referred to paragraph 1327 in the preliminary draft, where it is stated that if fair and reasonable requests were submitted for another kind of access to Míla fibre-optic network than has been described in paragraphs 1321 and 1326 in the preliminary draft, i.e. a fibre local loop from the node point to end-user, fibre local loop on a PON network, fibre cable from technical facility/telephone exchange to end-user or backhaul fibre line from technical facilities/telephone exchange to node point, Míla should accede to such a request where the access was technically and economically feasible. Should Míla refuse such an access request, this should be notified to the PTA with appropriate reasons and the PTA would decide on whether the access in question shall be granted.

Tengir said in connection with paragraph 1327, that it was negotiating an agreement with Húnaþing vestra on continued fibre-optic deployment in the municipality, and Míla had previously deployed fibre-optic there but had withdrawn from the project in the spring of 2020. Tengir had therefore only been taking over the project so that it would be completed. The intention was to request to connect the fibre-optic network with the Míla fibre-optic and from there to connect it into a Míla telephone exchange, but Tengir would operate active equipment in the system. In this manner, part of the local loops would be owned by Míla and part owned by Tengir. Such an arrangement had never before been made between the companies, but Míla had said that it was not yet clear, because of the PTA market analysis, whether and then how the company was authorised to accede to this request. Tengir requested that the PTA present its position with respect to this access request in Section 10.7.1.

The position of the PTA

The PTA considers that this market analysis is not the proper place to take a position in individual cases relating to access requests. In the event of dispute on specific access, then it is appropriate that the relevant company send a submission to the PTA to this effect. The PTA can subsequently take the case for scrutiny and request all views from parties to the case, before a position is taken. The PTA cannot however see that this market analysis should limit the Mila authorisation to provide access, if such access is not covered by the regulated access discussed in paragraphs 1321 and 1326 in the preliminary draft. It is furthermore unclear in the mind of the PTA whether the access described here by Tengir belongs in a general manner to Market 3a or to the trunk line lease market (Market 14/2004) and pursuant to PTA Decision no. 21/2015, various access obligations rest on Mila on that market. A new market analysis of that market is now being processed by the PTA and it is expected that it will be complete at the end of 2021.

Vodafone referred to paragraph 1321 in the preliminary draft, where 4 types of access are described that Míla offers today to fibre-optic in access network. The first type was fibre-optic local loop i.e., one optical fibre from the location of the optical distribution frame, where Míla has the last optical splitter to the demarcation box at the end-user's access address. This location was called CPOA and was situated where Míla had adequate capacity to provide P2P fibre-optic connection to end users. Another type was fibre-optic local loop in PON network which constituted a fibre-optic line from the end-user to a technical facility which housed the interface between the access network and trunk line network. Fibre-optic local loop in PON network is thus a traditional local loop along with an optical splitter and backhaul fibre. The third type was a fibre line from telephone exchanges/technical facility to end users and the 4th was a backhaul fibre line, which was one or more fibre-optic threads from the telephone exchange/technical facility to FDP, e.g., for VDSL2 equipment in street cabinet or optical splitter.

Vodafone stated that these optical splitters were usually below ground in wells or in a few instances in a telephone exchange. When they were in a well, it was not possible to acquire leased access there. It would be interesting if information was made public about whether there were any purchasers of these two options. The same applies to type four, i.e., backhaul fibre, where there were one or more fibres from the telephone exchange/technical facility to

FDP, for example for VDSL2 equipment in a street cabinet or optical splitter. To the best of Vodafone's knowledge, no one had been offered entry into Míla street cabinets.

The position of the PTA

The PTA gathered information from Míla on supply and demand for the products Vodafone is asking about. In the Míla reply it was stated that it was known, mainly in countryside networks, that P2P fibre-optic local loops were leased, but this was only a very few local loops. It is on the other hand not technically possible to provide other companies with access to fibre-optic local loops on the fibre-optic network with PON topology. Fibre-optic local loops (P2P) are therefore only accessible at locations where Míla has fibre-optic distribution frames and from those locations has at least one fibre-optic thread for each space in the relevant area. This applies to most countryside systems and also to a limited degree in urban areas, such as in Skagaströnd and Leirvogstunga.

Backhaul, fibre-optic is only used at those locations where Míla has fibre-optic distribution frames or in street cabinets. Míla only knows one example where a party outside the Siminn Group has installed equipment in street cabinets, and in that instance in their own street cabinet adjacent to a Míla street cabinet.

Míla noted that with respect to copper local loops, that use of vectoring had led to others not being able to use copper at those locations for bitstream. To react to this Míla had installed VULA but no one had yet requested such access. For this reason, this service has only been used internally with Míla up to this point in time.

If an electronic communications company requests the use of backhaul fibre-optic lines to lead to a fibre-optic distribution frame or equipment near or at a street cabinet and where such access is possible, then Míla can provide access to backhaul, fibre-optic lines, in connection with that, but Míla emphasises that backhaul fibre-optic lines are in this connection used for the purpose of reaching either distribution frame or equipment, and if it is possible to provide such access, then Míla will not stand in the way of providing a backhaul fibre-optic line to this. External parties are not purchasing backhaul lines today.

The PTA will update the text in the relevant paragraph in Appendix A on the basis of this information from Míla.

Vodafone refers to paragraph 1323 in the preliminary analysis where it is stated that it was hypothetically possible to share access to fibre-optic local loops on PON access systems by using wave division multiplex (WDM) for access requests, but one must consider it unlikely that a request for such access will be made during the lifetime of this analysis. One must also consider it a more likely development of the service that Míla use WDM technology to further develop its bitstream service, rather than that a new company would appear on the bitstream market that would provide Míla competition based on Míla's own fibre-optic local loops.

Vodafone states that it is interested in fibre-optic local loop lease with WDM equipment.

The position of the PTA

The PTA considers it appropriate that the paragraph remain as it is until a normal and reasonable request for the access described here is submitted. It can take a considerable time from making such a request until agreement is reached, and it also takes time to build the service so that it can be on offer to consumers. In this connection one can note the time that case procedure took for Access Option 1, from the first request by Vodafone until the service to consumers was active. Even though the PTA has said in the relevant paragraph that the Administration considered it unlikely that such a request would be made during the lifetime of the analysis, such an access obligation nevertheless rests on Míla, should a reasonable, fair and normal access request be received.

Vodafone referred to paragraph 1325 in the preliminary draft, where it was stated that service providers that wished to provide service through Míla local loops needed to build up their own data transfer system with the necessary equipment and operations that this required. This included equipment such as a system centre, equipment in Míla technical facility and user endpoint equipment. There was not yet any party that leased dark fibre local loops from Míla in any quantity for the purpose of competing with the company in the provision of bitstream service.

In the case of Vodafone, it was stated that the company was interested in such access, but always only received the answer that there is no Ljóslína available, only PON.

The position of the PTA

The PTA reminds about the discussion on development of Míla network in Sections 3 and 4 in Appendix A, where it is stated among other things that there can be specific limitations to the kind of access it is possible to offer on a network that is mainly based on PON topology. If Vodafone, or other electronic communications companies do not receive access that they consider they have a right to, they can refer the case for resolution to the PTA.

Vodafone referred to paragraph 1328 in the preliminary draft where it was stated that Míla was only authorised to limit access to and use of local loops on the basis of fundamental demands that related to operational security of electronic communications networks in emergencies, to the integrity of its systems and in proven instances of the operational capability of service systems and protection of data.

Vodafone noted that Míla often used this as an excuse. Vodafone asked who should verify such replies from Míla.

The position of the PTA

The PTA points out that a formal submission must be made to the PTA for it to be possible to commence an investigation of denial of requests for access. In such a case, the PTA could examine whether the access requested, fulfilled the basic requirements in question.

Míla said that according to the preliminary assessment, the PTA considered there to be an increasing need for significantly more burdensome obligations for access to ducts and other

Míla facilities. Míla pointed out that on 1 January 2020 Act no. 125/2019 had come into force on measures for economic deployment of high-speed electronic communications networks. This application applied equally to Míla as to other network operators.

Other considerations apart, the PTA intended to impose an obligation on Míla to build, as appropriate, an open database for other parties that contained information on ducts and conduits. The database shall contain precise information on the location and condition of the company's ducts and conduits. It should show among other things, which ducts, and conduits are free in part or in their entirety and can thus be used for such access. The database should among other things, show the above specified information in map form.

Míla pointed out that the company did not have information at many locations on use of ducts or free space in them. It was almost impossible, or at least extremely costly, to gather this information, and in addition to which, such recording could be very time-consuming and expensive.

In the PTA draft it also states that if there were cables in older Míla ducts and conduits, that were no longer needed, Míla would remove them if this could mean that interested electronic communications companies could make use of the ducts in question or conduits, but it was not clear whether this should be subject to a reasonable charge, which should always be the reality.

Míla should furthermore, in return for a fair charge, make necessary repairs and improvements to ducts and conduits so that they could be used for this purpose. Should agreement not be reached between Míla and the requesting party for installing fibre in a free duct or conduit, in return for a reasonable charge, Míla was obliged to give the requesting party, the opportunity to perform the task himself.

This was sensitive Míla infrastructure, and far from being a matter of course to provide requesting parties, and his possibly inexperienced and untrained employees/contractors with access to the ducts, which could result in significant damage and outage in whole geographic regions. This related to national security and could also result in major financial damage. As the obligation was worded, it could constitute that if the party in question was not satisfied with the price, then he would be granted such access. It would be much more reasonable for Míla to explain its charging and underlying criteria to the PTA, which would assess whether it was justified, and as appropriate, decide something else, where logical to do so.

Míla also strongly objected to what was stated in paragraph 1338 in the draft. According to what was stated there, the party requesting access should have priority access to the conduits ahead of Míla, and the company was furthermore banned from using its assets for up to 4 months, where fibre-optic conduits had not already been deployed, and as it appears, for up to 13 months in other areas. Nor was there any necessity for this, it should on the contrary suffice that Míla was unauthorised to use the ducts for the purpose of deliberately preventing their use by the interested party, if Míla plans had not been established. It was also totally absurd that another party could with his plans, prevent Míla deployment through its own ducts, such as the obligation in question appears to enable. It was one thing that Míla competitors could have access to space in ducts. It was quite another thing to impose an obligation on Míla that the company had to hand over facilities to competitors that Míla had deployed at its own cost and that the company intended to use. Míla considered that the PTA

did not respect proportionality in the obligations that the Administration planned to impose on Míla and that these rules were not according to constitutionally protected rights of ownership or Míla's right to usage.

These rules also gave Míla competitors the opportunity to prevent Míla civil works in the area for a whole year or longer, and without necessarily being used by the involved parties. The parties could for example request this information in April and inform Míla in August that they were not interested in using the ducts or conduits in question. At the same time, the competitor would be free to deploy his own conduit is in the area and Míla's possibilities of deployment, for example in the autumn would be inhibited by weather. This was totally absurd.

The position of the PTA

Míla pointed out that on 1 January 2020, Act no. 125/2019 had come into force on measures for economic deployment of high-speed electronic communications networks and that they also applied to Míla.

The PTA points out that this was the adoption of an EU directive from 2014 (BCRD directive) on the same subject. Many states in Europe have not considered this directive to be adequate on its own to ensure effective access to ducts and conduits of parties with SMP and have therefore also imposed obligations on such access in their market analyses after the directive in question had been implemented. One can refer to the fact that in the last Danish market analysis of the relevant wholesale markets, the Danish NRA (ERST) did not impose such an obligation on TDC, which was designated as a company with SMP in that country. The EU Commission raised objections to this. The PTA considers that the above specified legislation from 2019 does not on its own ensure efficient and effective access to Míla ducts and conduits, among other things because it lacks authority to impose an obligation for cost analysed price In NGA recommendations from the EU Commission from 2010 it is precisely stated that such an obligation is important for such access.

Míla furthermore points out that the company did not have information from many locations on usage of ducts or in free space in them, and that it was almost impossible, or at least very expensive, to gather this information, and that keeping of such records was furthermore time-consuming and costly.

As stated in the PTA preliminary draft, access to Míla ducts and conduits has not been common since this obligation was imposed on the company in the last market analysis from 2014. Various electronic communications company have however tried to get such access or have asked about it. A lack of information from Míla and high prices had prevented such access becoming a reality to any significant degree. The PTA now has a Míla cost analysis for such access under review. In the above, it is clear that the PTA considered it important to tighten the access obligation in question in order to endeavour to speed up development of fibre-optic networks in the countryside and to strengthen competition.

It is clear that this obligation will entail some costs and inconveniences for Míla if a company shows interest in this access in specific areas. The PTA however points out that the obligation will not apply in areas where there is more competition, and today that applies to an area

where about 70% of the country's inhabitants live. The PTA considers that the obligation in question will be first and foremost in areas where there is less competition and no fibre-optic network in place. For this reason, the obligation is not as burdensome as Míla would suggest. The PTA does not see why provision of information and even map making by Míla should be more difficult for the company than for companies in a comparable position in Europe, most of whom have had to fulfil this obligation.

Míla said that the PTA expected that Míla would remove older cabling in ducts and conduits that were no longer needed, if this meant that interested electronic communications companies could then use the infrastructure in question. In the opinion of Míla, it was not clear whether this should be against a normal charge, which must always be the case.

As stated in paragraph 1336 in the preliminary draft, the PTA plans to impose such an obligation on Mila. The PTA expects that Mila will do such work for the requesting party against a reasonable charge, in consultation with the requesting party. If an agreement is not reached, the PTA can decide a normal recompense. The PTA will revise the text of the paragraph in question.

Then Míla said that it was stated in the preliminary draft that Míla should furthermore, in return for a fair charge, make necessary repairs and improvements to ducts and conduits, so that they could be used for this purpose. Should agreement not be reached between Míla and the requesting party for installing fibre in a free infrastructure in return for a reasonable charge, Míla was obliged to give the requesting party the opportunity to perform the task himself. Míla said that this was sensitive Míla infrastructure, and far from being a matter of course to provide requesting parties, and his possibly inexperienced and untrained employees or contractors, with access to the ducts, which could result in significant damage and outage in whole geographic regions. This could impinge on national security and could also result in major financial damage. The obligation could mean that if the party in question was not happy with the price, he would be allowed to do the repairs and additions himself. It would be more reasonable for Míla to explain its charging and underlying criteria to the PTA, which would assess whether it was justified, and as appropriate, decide something else where logical to do so.

The PTA accepted the above specified Míla comment and intends to retract authority for the requesting party to do the necessary maintenance and additions to Míla ducts and conduits himself, in order to realise the access. On the other hand, the PTA will decide the charge if there is a dispute about it between Míla and the requesting party. The PTA will revise the text of paragraph 1336, in accordance with that.

Míla also strongly objected to what was stated in paragraph 1338 in the preliminary draft. According to that paragraph, the party requesting access should have access to the conduits to a greater extent than Míla, and Míla was banned from using its assets for up to 4 months, where fibre-optic was not already been deployed, and as it appeared, for up to 13 months in other areas. Nor was there any necessity for this, as it should on the contrary suffice that Míla was unauthorised to use the ducts for the purpose of deliberately preventing their use by the interested party, if Míla plans had not been established. It was absurd that one party could

with its plans prevent Míla from deploying through its own ducts and conduits. These rules could also give Míla competitors the opportunity to prevent Míla civil works in the area for up to 13 months or longer, and without necessarily being used by the involved parties. At the same time, the competitor would be free to deploy his own conduit in the area and Míla's possibilities of deployment would be inhibited. In the opinion of Míla, the PTA did not respect proportionality in this connection and breached the rule of constitutionally protected rights of ownership and Míla rights to use the infrastructure in question.

As stated in the paragraph in question, 1338, the obligation in question could lead to an access requesting party having priority to ducts and conduits for up to 4 months in areas where no one had deployed fibre-optic. The Míla reference to 13 months priority is probably not very realistic, because this refers to an area where some party has already deployed a fibre-optic network and that could be Míla itself. The PTA considers it extremely unlikely that the situation could arise where a party other than Míla had deployed a fibre-optic network and some third-party, other than Míla or the party that had already deployed a fibre-optic network in the relevant area, would show interest in deploying a fibre-optic network there. The PTA also reminds that the obligation in question would not apply in areas where there was more competition, which today covers about 70% of the population. The PTA considers that the 4 months' notice in question is not excessively long, given the nature of such investments.

The PTA agrees with Míla that the obligation in question may not prevent normal use by Míla of its infrastructure or fibre-optic development. The PTA therefore intends to revise the paragraph 1338 in question, in such a manner that if Míla had formally notified fibre-optic rollout in the area in question, with at least 6 months' notice, the priority in question of the requesting party would not apply. Míla has to take into account precisely which addresses are involved and the timing of the project. Míla is not obliged to notify about planned projects with more than 12 months' notice in this connection. In order to prevent Míla from abusing this authority for priority, the PTA can, subsequent to indications from interested requesting parties, evaluate whether the Míla rollout plans are realistic. The PTA can among other things, call for copies of agreements with contractors and budgets for the projects in question. Should the PTA assess that the planned projects in some area or areas are not realistic within the 12-month period in question, the PTA can decide that area or those areas, do not enjoy the Míla priority for projects.

Míla referred to Section 6.6.4 in the AM report which dealt with an obligation for access to Míla ducts and conduits. It was stated there that in those areas where the PTA planned to impose obligations on Míla for access to the company's ducts and conduits, there were specific aspects of the obligation that were likely to hinder or slow down fibre-optic rollout by Míla.

A price control obligation was likely to prevent Míla rolling out fibre-optic in more rural areas. Míla would not rule out networks in areas where the unit cost was likely to be higher than single price over the whole country, as such an investment would not be profitable. Investment in other areas that would be profitable, would then be delayed because of how burdensome the obligation for access to ducts and conduits was. The 6-month notification obligation could for example with respect to projects involving civil works for ducts and

conduits (paragraph 1342) overlap with the short period when it was best to implement such projects in this country. This could delay project implementation by a whole year.

The obligation for access to Míla ducts and conduits, which was intended to help Míla competitors in joint projects in new areas, was unlikely to encourage increased competition, as such projects were not profitable for Míla because of the price control obligation in question. Instead of this, Míla was likely to concentrate on projects in profitable parts of urban areas, given that such areas existed because of the price obligation in question. As GR and Tengir had now widely distributed their networks, profitable areas were probably those areas where the above specified companies had already extended their networks It was unlikely that further such joint projects would take place. This burdensome obligation would therefore only increase costs for Míla and delay deployment of Míla FTTH networks in the countryside.

In addition to this, these limitations could have the effect of slowing down the upgrading of Míla systems, which were necessary for another kind of electronic communications service, e.g., deployment of fibre-optic to new mobile phone transmitter locations for the purpose of supporting backbone for 5G service in the countryside. Such service was probably on another market (Market 4), but the obligation on Market 3a in question could nevertheless have an impact there.

In the opinion of AM, such increased cost and delays would not lead to gains for consumers.

Other NRAs took such possible consequences into account when elaborating obligations. One could name Portugal and the United Kingdom as examples.

When ANACOM had rejected complying with the opinion of the EU Commission in 2016 and imposed obligations on MEO fibre-optic, ANACOM had among other things stated that access obligations on the MEO fibre-optic system, including in areas without competition, could have negative consequences, as such could lessen the desire of companies to invest, and at the same time diminish incentive for the company's competitors to invest, as they would wait for an investment from MEO. ANACOM had stated that in the municipalities where such an obligation would be imposed on MEO, MEO had not yet ruled out a FTTH network, and the obligation would not strengthen competition, because such a network had not been deployed in the areas in question and then would not be deployed because of the obligation. ANACOM had also stated that it was important to carefully consider the advantages and disadvantages of potential obligations, given the objectives that sought, i.e. competition on the one hand and deployment of next generation networks on the other hand. If next generation networks are not rolled out to specific areas, because of excessively burdensome obligations, this would impinge on the competition and in the end, on consumers.

Then AM noted that Ofcom had stated in its document from January 2020: "Consultation: Promoting investment and competition in fibre networks – Wholesale fixed telecoms market review", in connection with areas where there was a possibility that competitors of Openreach would distribute next generation networks, that imposition of obligations in these areas needed to achieve a balance between protecting the existing model for protecting competition and consumers in the long term, and gains from encouraging investments in competition in new networks for the long term.

There it was furthermore stated:

"To this end, we propose to require Openreach to continue to provide wholesale access to its WLA and leased line access services. In the WLA market we propose to focus our charge controls only on the provision of the FTTC 40/10 product (until such time it is appropriate to switch regulation to FTTP) with no charge control on higher speed services. This provides scope for Openreach to innovate in the provision of higher speed services whilst at the same time maintaining incentives for investment by potential alternative network operators and allowing Openreach to recover its costs."

Ofcom therefore proposed to use anchor pricing, which was in accordance with the assessment of the NRA on chain of substitutability, in order to avoid creating incentives that could discourage investments.

The position of the PTA

AM refers to certain factors in the obligation for access to ducts and conduits being likely to hinder or slow down fibre-optic rollout by Míla.

The PTA refers to its reply here above, where the Administration says it intends to remove some issues from the obligation as it was worded in paragraphs 1336 and 1338 in the preliminary draft. The PTA has decided to retract the intention to impose an obligation for cost analysed prices on Mila fibre-optic network for the time being, but instead stipulate an ERT obligation on the Siminn Group.

The PTA does not however agree with AM that the obligation for access to Míla ducts and conduits could not lead to faster and wider deployment of fibre-optic networks in the countryside or increase competition. In the opinion of the PTA, this is unfounded on the part of AM, and appears first and foremost to be connected to the above specified planned cost analysis obligation on Míla fibre-optic.

Míla commented on paragraph 1336, where it was stated that should the situation arise that an electronic communications company requested to install a new cable in a Mila duct or conduit on the market now under discussion, that was not fully used, Míla should accede to this request. Should a reasonable request to this effect be made by an interested network operator, that was deemed normal and fair, then Míla should prepare a database, which contained precise information on the location and condition of the company's ducts and conduits. It should show among other things, which ducts, and conduits are free in part or in their entirety and can thus be used for such access. The database should among other things, show the above specified information in map form. Míla shall give the PTA and interested electronic communications companies access to the database in question. Should older cabling be in Míla ducts and conduits that are no longer needed, Míla shall remove them if this could result in interested electronic communications companies being able to use the ducts or conduits in question. Mila should furthermore, in return for a fair charge, make necessary repairs and improvements to ducts and conduits so that they could be used for this purpose. Should agreement not be reached between Mila and the requesting party for installing fibre in a free duct or conduit, in return for a reasonable charge, Mila was obliged to give the requesting party the opportunity to perform the task himself.

Míla stated that here the PTA intended to impose an obligation on Míla for a database for others and to maintain unused Míla ducts and conduits for others. In Míla's opinion, this was

an expensive obligation. The condition of decades old pipes can be poor, and it could be expensive to remove old cabling from them. This required for example civil works to dig down to cabling where pipes had collapsed, in order to repair them. Míla considered there to be no certainty that such measures would be paid for by the requesting party. It was also strange that the paragraph appeared to allow for the requesting party deciding what was a reasonable charge, and then he could himself do work on the sensitive Míla ducts and conduits. There did not appear to be any requirement that the party in question compensated for damage that Míla or Míla customers suffered if this caused outage on Míla lines. Nor did there appear to be any distinction made with respect to what cabling was already in the pipes, whether trunk line cables for the fibre-optic ring were in them or unused copper local loops. It was clear that access for inexperienced or untrained staff to pipes with trunk line cabling could cause significant damage and outage in whole regions. This impinged on national security and Míla strongly objected to these plans.

The position of the PTA

The PTA has here above answered an almost identical comment from Míla, and reference is made to that. The PTA reiterated that it plans to retract the possibility that requesting parties can conduct maintenance or renewal on Míla infrastructure, or remove cables or threads from such infrastructure, if an agreement is not reached for payment to Míla for such work. The situation now is that the PTA can decide a reasonable charge, if parties do not come to an agreement on the Míla charge.

Then the PTA points out that this obligation only covers the Míla access network and not the company's trunk line network. The trunk line network belongs to Market 14/2004, see PTA Decision no. 21/2015, and the Administration is now working on a new market analysis for that market, which one can be expected to be completed at the end of 2021 or early 2022.

Míla commented on paragraph 1338 where it was stated that after having received the above specified map data and the above specified information on Míla ducts and conduits, the network operator who was interested in utilising free space in the ducts and conduits should submit an order for access within one month of the time that he took delivery of the data and he should specify, as precisely as possible, which ducts or conduits access is requested for. Míla should not commence work on its own deployment of optical fibres in the area in question, in which the network operator had shown interest subsequent to a request having been made that Mila provide the above specified information and until the notice of one month had passed that the network operator had to decide whether he would use access to the ducts and conduits. During the period in question, the requested ducts or conduits in the area are therefore reserved for the interested network operator. The period in question could be shorter than 4 months, all depending on how quickly Míla delivered the necessary information on those ducts and conduits that the request concerned, to the interested network operator. After an order had been made, Mila was unauthorised to install cables or perform any work on the ducts and conduits covered by the order, that in any way would impair the network operator's requested access to those ducts and conduits.

Míla strongly objected to these PTA plans. In the first case, Míla objected to other parties having priority to Míla ducts, above and beyond Míla itself. It was one thing that competitors

could get access to space in ducts that the company did not intend to use. It was quite another thing to impose the obligation on Míla that the company had to hand over facilities to competitors that Míla had deployed at its own cost and that the company intended to use. Míla considered that this was not compliant with the company's constitutionally protected rights.

These rules also gave Míla competitors a method to block projects in the area for a whole year Assume that Míla planned to start a project when the snow melted in April and had notified this as prescribed by the rules. One of the preparations required for this was to hire a contractor and design the system. Before the work started or even while it was in progress, the competitor could request information from Míla about ducts and conduits in the area. According to these rules, Míla would need to postpone or stop the work for 4 months. In this way the party could spoil the work duration for a whole year in the area, as the possible work duration was short because of the climate. The party could for example request this information in April and inform Míla in August that he was not interested in using the ducts or conduits in question that were in that area. At the same time, the competitor would be free to deploy his own cabling in the area. This could cause Míla serious financial damage, as it was likely that the work that had been commenced would be of no value and the contractor would need to be compensated for his damage.

The position of the PTA

The PTA has here above answered a similar comment from Míla, and reference is made to that.

Míla commented on paragraph 1340, where it was stated that Míla had provided facilities, e.g., in buildings, on the basis of article 25 of the Electronic Communications Act. Despite this the PTA considered it necessary to impose this obligation on Míla on the basis of Paragraph 2 of Article 28 of the same Act as an incentive could be created for companies not to give new parties access to their facilities. A reasonable request for co-location was considered to be a request for free space in Míla buildings and such a definition could also include a request that required enlargement or building of the premises.

Míla emphasised that if one had to embark on costly alterations to premises or enlargement of premises, the party that requested the space was the one that would pay the costs.

The position of the PTA

The PTA considers that if premises need to be enlarged because of an access request, which was considered reasonable, fair and normal, then the cost of that is included in the general Míla cost base where such an enlargement would be owned by Míla and available for use for the company. It is not unusual that a requesting party that submits such a reasonable access request, needs on his own to pay for such enlargement or new building, which could then be subsequently used by Míla and other requesting parties.

Míla commented on paragraph 1341 in the preliminary draft, where it was stated that Míla was to publish a list of planned civil works and cabling work with 6 months' notice. This obligation covered both digging holes and ditches, but repairs or renewal of individual local loops was not covered by this obligation. The obligation was intended to cover overall

development where no infrastructure was underground and civil works and cable laying where infrastructure was in place and where infrastructure was being laid or fibre-optic cable being pulled through them to building and to other works related to development and rollout of fibre-optic networks. Míla was authorised to shorten the notice in the advertisement down to 3 months if the company laid additional ducts in all parts of the works in question, that another electronic communications company could use at a later date. The duty to advertise pursuant to this paragraph did not apply to an area where there was a fibre-optic access network already in place and owned and operated by a party other than Míla.

Míla made the comment that digging holes should have a 6-month notification obligation. It was not burdensome cost-wise for electronic communications companies to dig holes if that were necessary. In addition to this, it cannot be considered normal that an inhabitant in a district where fibre-optic had already been deployed needed to wait for 6 months for a connection into his building, because one hole had to be dug to connect the house in question. New buildings in older districts would need to wait for 6 months to get a connection. Míla also pointed out that this obligation could not be imposed for individual local loops when the building was added or when a special order was made on an individual local loop, as long as Míla could actually do this.

The position of the PTA

The PTA emphasises that an obligation for notification of civil works applies to major projects in municipalities, districts or even streets for new deployment. Work on each local loop for repairs or orders is not included under the obligation to notify. The PTA points out that this duty to advertise does not apply in those areas where there is more competition, and this obligation is one of the three obligations that the PTA plans to lift in such areas, and they now reach about 70% of the country's inhabitants. The list will be updated annually.

Míla commented on paragraph 1349 in the preliminary draft where it was stated that companies that leased access to Míla networks and facilities, often had to have access to electricity for equipment that they had installed in the leased facilities. With reference to item i in paragraph 2 of article 28, the PTA had planned to impose an obligation on Míla to provide lessees with access to electricity where this could be implemented.

Míla considered it unnecessary to impose an obligation to provide access to electricity. It was very difficult for Míla to collect the proper amount as was stated in communications with the PTA. There was however not much cost for others to install metres. Míla therefore considered it normal that each party was responsible for his own electricity. That was in accordance with proportionality.

The position of the PTA

PTA considers it necessary that Míla make it possible for a lessee to have access to electricity, so that access to the Míla local loop can be used by him, regardless of whether the lessee in question installs his own metre or not, and this can be decided to a certain extent by the circumstances in each individual case.

Míla commented on paragraph 1350 in the preliminary draft, where it was stated that the obligations that now rest on Míla for access to copper local loops, should not be withdrawn. Even though Míla migrated the structure of its systems to next generation networks, for example if fibre-optic cables replaced copper local loops, unless an agreement on the procedure of the migration had been reached and the lessee of the local loop was ready to accept the new type of local loop instead of the older one when the migration took place. Should such an agreement not be reached then Míla should inform parties to the market of all changes to the arrangements of local loop access that are likely to alter companies' competitiveness on the market with five years' notice. Deviation may be made from the above period of notice on receipt of advance endorsement by the PTA. If a Míla request for such an exemption is considered normal and reasonable, the PTA would open consultation with stakeholders. If no material objections were raised and stakeholders had access to substitute products and did not suffer any unnecessary damage when migrating between systems, the PTA would endorse such an exemption.

Míla considered this obligation to be very burdensome for Míla. To be forced to operate two systems, where one party was not ready to offer service on the new system, was very costly.

The position of the PTA

The PTA emphasises that the 5-year period in question is a guarantee against the unlikely instance where the copper system is decommissioned and wholesale customers lose their access without a new access network coming instead, or that those parties do not have normal access to the system that should take over. The PTA points out that it is specifically noted that Míla can submit a reasonable request to the PTA for shortening of the period of notice and should material objections to the request not be submitted during the consultation and where access to substitute products is still in place, the PTA will endorse such shortening. This is then one of the three obligations on the relevant market, that the PTA intends to lift from Míla in those areas where there is more competition, and as previously stated, that area now reaches about 70% of the country's inhabitants, and in addition to this the list of the relevant municipalities will be revised annually.

10.7.2 Obligation for non-discrimination

Vodafone refers to paragraph 1371 in the preliminary draft and said that it had to be clear where, and how Míla should publish information about key performance indicators and how often the company needed to update them.

The position of the PTA

It is clearly stated that the information shall be published monthly on the Mila website.

10.7.3 Obligation for transparency

Míla commented on paragraph 1389 in the preliminary draft, where there was a listing of the elements that as a minimum should appear in the Míla reference offer.

Míla considered there to be no reason to demand further amendments to the reference offers, other than those that related to access to ducts. Electronic communications companies have been pleased with the current arrangement, and there is nothing to indicate that further demands on Míla describing matters in detail mattered in any way to these parties. This represented significant increased cost and inconvenience solely for Míla. Míla considered that the PTA had no examples that called for the work that this required.

The position of the PTA

The listing of minimum contents of the reference offer is taken from recommendations BEREC from 2019, BEREC Guidelines on the minimum criteria for a reference offer, BoR (19) 238. The structure of the description of contents is slightly changed from that in market analysis 2014, but the content is actually very similar. As Míla points out, provisions needed to be added about access to ducts and conduits, but in other respects, there is little that is not either in the listing of minimum content in market analysis 2014 or already in the Míla reference offer, such as SLA and SLG.

10.7.4 Obligation for separation of accountancy

No comments were received in connection with this Section.

10.7.5 Obligation for price control

Míla pointed out that a wrong decision on imposition of price control could have serious negative competition inhibiting consequences, among other things on investments of electronic communications companies to the detriment of end users. Míla referred to the Analysys Mason report, among other things with respect to decisions of Ofcom and ANACOM. ¹⁸

The position of the PTA

The PTA has examined Siminn Group comments and does not expect to impose an obligation on Mila for cost analysed price for access to fibre-optic local loops on Market 3a, nor on connections over fibre-optic in Market 3b. As is stated in the PTA additional consultation on last 30 October, the Administration plans instead to impose an obligation that the Siminn Group withstands an Economic Replicability Test (ERT) concerning the Group's fibre-optic products in accordance with the recommendation of the EU Commission on harmonised application of obligations for non-discrimination and for cost analysis methodologies to support competition and strengthen investment in NGA networks. The PTA considers that with this, there will continue to be an incentive to invest in fibre-optic local loops. In order to monitor that there will be no abnormally small difference between wholesale and retail prices of the Siminn Group, such that competitors cannot emulate Siminn's retail offers, the PTA plans to begin preparation for a decision on the elaboration and introduction of an ERT test,

-

¹⁸ In case PT/2016/1888-1889.

immediately after the decision on obligations subsequent to this market analysis has come into force. The PTA will consult with stakeholders on the elaboration of the test.

Simin drew attention to the fact that the conditions for imposing an obligation on the basis of article 32 on price control were limited to the analysis having shown that because of ineffective competition, the dominant market party was demanding excessively high charges or that there was an abnormally small difference between retail and wholesale prices. Siminn pointed out that authority pursuant to article 32, did not cover circumstances where the electronic communications company in question could possibly increase prices, but the analysis had rather to demonstrate that the company in fact demanded prices that were too high. There was no authority to impose a price control obligation if pricing was too low or if there was too great a difference between wholesale and retail price. The PTA seems not to assert the latter and nor does it assert that the Mila pricing was too high. The PTA could investigate the difference between GR wholesale prices for access charge and GR retail price and assess whether there was a normal difference. In any event, one had to examine this issue in the light of the fact that GR had over 50% market share in the area.

Siminn pointed out in this respect that there was still an obligation in force on price control for xDSL connections. The PTA had on the other hand, prescribed a higher price than Míla wished to charge. The largest proportion of Míla local loops (fibre and xDSL) was in the price range ISK 1500-2000 and the retail price of Míla connections was generally about ISK 2800 ex VAT. Míla did not sell connections in retail. GR sold connections in retail at ISK 2723 ex VAT (ISK 3377 incl. VAT) but the wholesale price was not published on the GR website, as is the case with other fibre-optic systems. Vodafone retail price was ISK 3490, including VAT. Nova retail price was ISK 3390, including VAT. Siminn said that there was in reality little difference in the wholesale and retail price with GR.

The position of the PTA

The PTA does not agree with the Siminn interpretation that excessive charges in wholesale need to be in place when the market analysis is conducted. One could for example mention that in instances where an obligation for cost analysed prices is in force, it is clear that real collection of charges cannot be excessive if the cost analysis is properly done. This can however be excessive charging if obligations are lifted and then, by the nature of things, one must understand the provision in that way, that for it to be applied, there needs to be a lack of efficient competition that results in an electronic communications company with SMP being able to demand excessive charges, if nothing is done. It is therefore not possible to interpret the provision in such a narrow manner that it only covers actual charging, at the time that the market analysis is conducted. In addition to that, the PTA points out that the provision should be interpreted in accordance with EEA law and that in the Directive 2002/19/EU, it is stated clearly that there only needs to be a possibility of excessive charging. The PTA has demonstrated that there is a risk of excessive wholesale prices, among other things because of vertical integration of the Siminn Group.

The PTA has reviewed its position with respect to the obligation for cost analysed prices for access to fibre-optic local loops. The PTA plans instead to impose an obligation on the Siminn Group to the effect that the Group withstands an ERT test concerning the Group's fibre-optic products in accordance with the recommendation for harmonised application of obligations

for non-discrimination and for cost analysis methodologies to support competition and strengthen investment in NGA networks. Imposition of an obligation for an ERT test is part of monitoring that the obligation for non-discrimination is complied with. This is intended to ensure that competitors on the market have the same opportunity as the network operator to offer Internet service packages at retail price at a price that can compete with the retail arm of the network operator. In a new EU Directive on electronic communications 2018/1972/EU, ERT is mentioned in sub paragraph 3 in paragraph 1 of article 74, which discusses price control, where it states that on the other hand an ERT test should be applied pursuant to article 70 which discusses the non-discrimination obligation. It seems therefore to be generally considered that the ERT test is part of the non-discrimination obligation. The ERT test constitutes however some kind of price control, and the PTA considers it appropriate to refer both to article 30 of the Electronic Communications Act (non-discrimination) and article 32 (on price control), with respect to the legal basis for an obligation for an ERT test. As stated here above, the PTA plans to commence preparation of a decision on elaborating an introduction of an ERT test and stakeholders will have the opportunity to submit comments on individual aspects of the test, such as what will be the relevant retail services that will be used as a reference. It is therefore clear that it is not only the retail price of the line charge that is taken into account when assessing whether there is an abnormally small difference between retail price and wholesale price.

With respect to Siminn comparison of the price of local loops of GR and Míla, Míla is not delivering access to its GPON local loops without bitstream, and GR is only selling its local loops with bitstream. For this reason, comparison of the price of fibre-optic local loops without bitstream is not significant and it is necessary to examine price with bitstream and also factors such as where bitstream is delivered. The PTA would also like to point out that it is the PTA conclusion that Míla has SMP on Market 3a while GR has not been designated as a company with a dominant position on this market. The PTA is therefore not authorised to impose price control on GR. It is correct when Siminn says that GR has just over 50% market share in the Capital City Area, but that is not the case in the whole of the GR operational territory. GR had [...]% market share in the Capital City Area at the end of 2020 on Market 3a but a little less in the company's operational territory as a whole, i.e. [...]%. The PTA considers it more appropriate to refer to the entire area of operation of GR, and not only part of what is best suited to the Siminn Group.

Simin said that it was concerned that if there were no indications of pricing being too high, whether that was with Míla, Tengir or GR, there was a danger that electronic communications companies that purchased the service from the parties in question, could not leverage competition between parties, whether that was in bitstream service or, as appropriate in lease of local loops. It was known that price control obligations led to the disappearance of flexibility in pricing which resulted in purchasers of the service not having been able to make an agreement on the terms within a specific framework. Simin proposed that the PTA first defined what the concept of high charges constituted, and, in this way, a basis would be formed for criteria that the PTA could use to assess whether a company was demanding excessively high charges, which purchasers could not press down on the basis of competition between parties. In this way, the PTA could intervene, if necessary, but not before. Otherwise,

there was a risk that the PTA intervention would come too soon and damage the competitive process that is inherent in negotiating agreements between two parties.

The position of the PTA

Reference is made to the PTA answers above. The PTA has reviewed its position with respect to the obligation for cost analysed prices for access to fibre-optic local loops. The PTA proposes instead an obligation on the Siminn Group to the effect that the Group withstands an ERT test concerning the fibre-optic products of the Group in accordance with the recommendation for harmonised application of obligations for non-discrimination and for cost analysis. Such a measure would give the Siminn Group greater latitude in pricing than cost analysed prices for access, while exercising sufficient restraint in pricing in the opinion of the PTA, such that it did not harm competition.

Míla referred to the PTA preliminary assessment on the necessity to maintain obligations and on the impact of obligations that were currently in force and about imposing further obligations on Míla on Markets 3a and 3b, including for price control on these markets. Tariffs should in both instances of copper and fibre-optic be cost oriented. Míla considered the planned obligations to be significantly flawed. Planned obligations were significantly burdensome and had among other things a negative impact on Míla incentive to invest.

The position of the PTA

Reference is made to the PTA answers above. The PTA has reviewed its position with respect to the obligation for cost analysed prices for access to fibre-optic local loops. The PTA proposes instead an obligation on the Siminn Group to the effect that the Group withstands an ERT test concerning the fibre-optic products of the Group in accordance with the recommendation for harmonised application of obligations for non-discrimination and for cost analysis obligations, that could provide it with more latitude with respect to pricing in individual areas. The PTA considers that maintaining existing price obligations regarding the copper products and imposing an obligation for an ERT test for the fibre-optic products is not very burdensome for Míla and Siminn in the light of the PTA conclusion on market strength of the Siminn Group and of all identified competition problems.

Míla states that the cost analysed obligation on the company's fibre-optic would also have a negative impact on the Míla incentive to invest. This is precisely one of the issues that the PTA took into consideration, when the Administration decided to retract the intention to impose the cost analysis obligation in question on Mila fibre-optic products, for the time being.

Míla pointed out that a majority of the alleged competition problems described in the PTA preliminary assessment in connection with Markets 3a and 3b, could be attributed to problems related to retail markets. The problems in question would on the other hand in the light of their nature, not be solved by obligations that the PTA intended to maintain on Míla, at market wholesale level, as they seemed not to have served the purpose as the PTA considered the problems still to be in place.

The position of the PTA

Reference is made to the PTA answers above. The PTA has reviewed its position with respect to the obligation for cost analysed prices for access to fibre-optic local loops. The PTA proposes instead an obligation on the Siminn Group to the effect that the Group withstands an ERT test concerning the fibre-optic products of the Group in accordance with the recommendation for harmonised application of obligations for non-discrimination and for cost analysis. In the light of the above, it is very important to maintain obligations on the copper local loop market and on Míla xDSL service in order that Míla cost analysed prices for this service can restrain price increases in broadband service in retail.

The reason that the PTA describes real competition problems that have arisen at retail level is to describe how the Siminn Group has used its strength and its position as a vertically integrated electronic communications company in an abnormal manner, and damaged competition on electronic communications markets. The PTA also considers that the ERT obligation in question could be used to remedy competition problems at the retail level.

Míla refers to paragraph 1420 in the preliminary assessment where there is discussion on articles 48 and 49 in the EU Commission recommendation, dated 11 September 2013 on the implementation of harmonised non-discrimination obligations and cost analysis methodologies. The conditions were examined that needed to be fulfilled for it to be advisable to apply an Economic Replicability Test, instead of deciding price on the basis of cost analysis. Míla considered that the PTA had not tried to demonstrate these conditions. Míla considered that GR was or would become a party with market dominance in the largest part of its service territory during the lifetime of the analysis. Míla also considered the fact that the copper anchor was not working for the purpose of restraining retail prices, strengthened Míla's view that copper and fibre-optic local loops were in reality not on the same market in Iceland. It was clear that copper and service over copper was not a substitute product for corresponding service over fibre-optic. The fact that Míla price for copper was not reflected in retail prices of service providing companies, meant that Icelandic consumers did not consider copper connections to be a substitute, and would not move from fibre-optic over to copper, even if the price of fibre-optic was increased.

The position of the PTA

With regards to market share and substitutability between copper and fibre-optic, this is discussed in Sections 3 and 4 here above in the same sections in the revised analysis (Appendix A) and in Appendix C. As has previously been stated, the PTA specifically examined the Míla assertion that there was not substitutability between copper and fibre-optic local loops and commissioned a consumer survey to investigate whether the assertion could be supported by arguments. The PTA has come to the conclusion that there is still substitutability and a closer examination of the status on the market made no difference in this respect to the PTA position.

Given the comments of Míla and AM, this indicates that the copper anchor is in fact in place. After having examined arguments on potential lack of copper anchor, having taken into account submitted comments, and with a view to the recommendation 2013/466/EU and to the conclusion of the consumer survey commissioned by the Administration, the PTA has reviewed its position on this issue. The conclusion of the consumer survey showed that

consumers considered that they would be prepared to switch from fibre-optic over to the Míla Ljósnet (which is the name for Míla VDSL service) if the price of fibre-optic local loops increased by 10%. With respect to arguments for the existence of a copper anchor and for the application of an ERT test, reference is made to Section 3 in Appendix C and to Section 10.7.5 in the revised PTA market analysis (Appendix A).

Míla referred to paragraph 1424 in the preliminary assessment, where there was discussion on whether an infrastructure system that was not controlled by Míla or the Siminn Group could restrain retail prices. Míla believed that the PTA assessment was not based on arguments. It was established that in sparsely populated and rural Iceland there would only be 1 or 2 fibre-optic networks.

The position of the PTA

In the preliminary analysis, the PTA considered that it was possible that those monthly prices on offer on those networks that are not controlled by Míla or the Siminn Group, could exert restraint on Siminn retail prices for Internet connections over fibre-optic. As is stated in the PTA geographic analysis, there seems to be more competitive pressure inside some areas where an alternative fibre-optic network has been deployed. The PTA considered on the other hand, that there was not sufficient competitive pressure, as there is only one competitor in each area and competitive conditions are not sufficiently different between areas, and Siminn has been maintaining its market share in these areas well in recent times, or at least has not lost market share to any significant degree. In the opinion of the PTA, the competitive pressure in question is not sufficient to conclude that there is effective competition at wholesale level, but there might be sufficient to hinder a party with SMP from demanding excessive retail prices. One has to keep in mind that Míla fibre-optic local loops are mostly either in competitive areas or are subject to state support rules and so there must be some pricing restraint in place.

The PTA considers that having in mind the most common implementation in the EEA, where it is most common to apply lighter obligations on fibre-optic in accordance with recommendation 2013/466/EU, it is appropriate not to apply too strict an assessment of the existence of the above specified conditions. It is clear that there is a certain level of competitive pressure and the PTA considers that this suffices to come to the conclusion that it is proper to apply an ERT test instead of cost analysis of fibre-optic local loops.

Míla refers to paragraph 1425 in the preliminary assessment, where the views of the PTA are presented to the effect that there were no grounds for applying lighter obligations in the form of an ERT test on the Siminn Group instead of cost analysed wholesale prices for service over Míla fibre-optic local loops. Míla considered this to be incorrect. During the lifetime of the analysis, there would be parties other than Míla that had deployed fibre-optic to 90-95% of homes in the country. Most if not all service providers in Iceland, with the exception of Siminn, chose another network operator in the relevant wholesale markets if there was such an option. The PTA therefore had no real reason to apply a price obligation on Míla, and certainly not in those areas where Míla had no infrastructure on Market 3a or where Siminn was not a dominant operator as in the Capital City Area.

The position of the PTA

Reference is made to the PTA answers above. With regards to market strength of Míla on the relevant market and Siminn, there is discussion in Sections 3 and 8 in the revised market analysis (Appendix A), where the conclusion of the Administration is that Míla has SMP on the relevant wholesale markets. The PTA also considers, as is stated in Sections 5-7 here above, and in the same sections in the revised market analysis (Appendix A) that there is no reason to segment separate geographic markets in this country on the relevant wholesale markets. Reference is made to this.

The PTA has reviewed its position with respect to the obligation for cost analysed prices for access to fibre-optic local loops. The PTA proposes instead an obligation on the Siminn Group to the effect that the Group withstands an ERT test concerning the fibre-optic products of the Group in accordance with the recommendation for harmonised application of obligations for non-discrimination and for cost analysis.

The fact that some service companies have not decided to use the Míla fibre network, where fibre-optic is available from a Míla competitor, can have various explanations. The explanation could for example be attributed to Míla being owned by their largest competitor at retail level. Despite this, Míla has SMP on these markets as previously stated.

The PTA refers to prior answers with respect to the Míla assertion that other parties will have completed deployment of fibre-optic to 90-95% of homes in the country. As stated in Section 6.4, it is the PTA assessment that this proportion will have reached about [...]% at end of year 2023.

Míla referred to paragraph 1427 in the preliminary assessment, where it was stated that the PTA considered it not to be necessary at this point in time to take into account distribution incentives when elaborating price obligations, as almost 100% distribution of next generation access networks (fibre-optic local loops and VDSL) had been achieved in this country. Reference was also made in the paragraph to identified and potential competition problems on the relevant market as grounds for price control on Míla fibre-optic local loops.

Míla considered it clear that with this, users in the countryside that had not yet received fibre-optic would inevitably have to pay more than others for access (setup charge) to fibre-optic, or that the state and municipalities would need to be involved for this deployment to happen. Míla had a long way to go in completing its fibre-optic development, as the company lags significantly behind its competitors. The fact that a large proportion of homes could have access to fibre-optic meant that the project was well advanced cost-wise. The reason was that up to this point in time, Míla had concentrated on the most economical addresses, i.e. multiple dwelling buildings or cooperative projects. In this way Míla had only deployed to about one third of addresses in the country. With this market analysis, Míla was being prevented from deploying to the remaining 2/3.

The position of the PTA

Reference is made to the PTA answers above. In the recommendation for harmonised application of obligations for non-discrimination and for cost analysis obligations, emphasis is placed on encouraging deployment of next generation access networks (fibre-optic local

loops and/or VDSL networks). As stated in the PTA draft market analysis, distribution of VDSL networks is very substantial in this country and one cannot assume further investments in such connections to any significant degree. There is therefore no reason to encourage further development of such connections.

The PTA, however, agrees that there is a long way to go before reaching deployment objectives for fibre-optic local loops, particularly in the countryside. According to the parliamentary opinion on policy in electronic communications for the years 2019-2033, the objective is that access for homes and commercial premises to fibre-optic should be 99.9%. The PTA considers it appropriate to avoid obligations which could jeopardise objectives of the country's fibre-optic rollout, where possible. In the light of the status of development of fibre-optic local loops at a national level, the PTA therefore considers it appropriate not to impose obligations for cost analysed prices for such connections for the time being. The PTA proposes instead an obligation on the Siminn Group to the effect that the Group withstands an ERT test concerning the fibre-optic products of the Group in accordance with the recommendation for harmonised application of obligations for non-discrimination and for cost analysis.

Míla refers to the fact that the company has only deployed fibre-optic to 1/3 of addresses in the country. The correct figure is that this proportion had reached at least 47% of homes and companies in the country at end of year 2020, and it was clear that this proportion would rapidly increase during the lifetime of the analysis, given the development plans that Míla has revealed to the PTA in answer to queries from the Administration. As previously stated, it is also likely that the above figure for the distribution of Mila fibre-optic cables at the end of 2020 is considerably higher than stated there. In its investor presentation in early September Siminn Group stated that Mila's FTTH network reached 100 000 homes in Q2 2021

Míla said that Míla's main objections, the report from Analysys Mason from 1 July 2020 (commissioned by Míla) and the document with comments on individual paragraphs should be seen as a single entity.

Analysys Mason pointed out that the only arguments based on price that we used to support price obligations, where statements by GR on Míla predatory pricing. Real proof of Míla predatory pricing was however not presented, for example with a comparison with real costs. The PTA has used as grounds, unfounded accusations from competitors who would gain from an increase in Míla prices. Even if the GR accusations were true, then the problem complained about would be predatory pricing. If this is considered to be a risk that needed to be mitigated, it would be appropriate that the minimum wholesale price was calculated on an incremental basis. Elsewhere in the document (paragraph 789), the PTA concluded that the difference in Míla prices for fibre-optic local loops in wholesale between the countryside and urban areas, was related to varying unit costs in differing areas, which indicated that the Míla price was cost related. Nor was any documentation submitted in support of this. By drawing this conclusion, the PTA was in contradiction with itself.

The position of the PTA

Reference is made to the PTA answers above. The PTA has reviewed its position with respect to the obligation for cost analysed prices for access to fibre-optic local loops. The PTA

proposes instead an obligation on the Siminn Group to the effect that the Group withstands an ERT test concerning the fibre-optic products of the Group in accordance with the recommendation for harmonised application of obligations for non-discrimination and for cost analysis.

With respect to the difference in unit cost prices of fibre-optic local loops between rural and urban areas, it has been stated by Míla, among other things in the company cost analysis, that costs are higher in the countryside. There is also the fact that all state grants for rollout of fibre-optic networks in the countryside are because of this difference, as discussed in the PTA analysis. It is also clear that the number of spaces/dwellings at each address is significantly more in the most populated parts of the country, as there are more multiple dwelling buildings when compared with the countryside. The number of spaces at each address has a significant impact on unit costs. The PTA cannot see that there is a contradiction in PTA arguments in this respect.

The PTA has not cost analysed Míla fibre-optic local loops and can therefore not assert that the Míla price is too high or too low in those areas where Míla operates a fibre-optic access network. If the cost of investments and operation of fibre-optic local loops were analysed for each area in the country, it is very likely that there would be a cost difference between areas, on the basis of what has been said by Míla, and the price difference with Míla between the two most densely populated areas on the one hand and the countryside on the other, could therefore be explained with varying costs. This does not alter the fact that there is an incentive for the Siminn Group to predatory price in areas where new parties have started to offer fibre-optic local loops in competition with Míla. At locations where a price obligation was not in place, Míla could adjust its tariff in such a manner that the price was below cost in selected areas. The Group has the opportunity to recoup such predatory pricing on the strength of the strong position of the Group and by virtue of the fact that the company is vertically integrated. This could for example be done with excessive markup on the retail market for service based on copper local loops.

The PTA also rejects that the only factor applied by the Administration in its reasoning for an obligation of cost analysed prices for Míla fibre-optic, would be potential predatory pricing. The PTA identified a large number of competition problems, many of which were related to Siminn Group pricing. Reference is made to Section 10.2 here above and to the same sections in the revised analysis (Appendix A) in this connection.

Míla referred to paragraph 1428 in the preliminary draft, where reference was made to more detailed discussion on price obligations. Míla considered that the PTA arguments did not hold. The truth of the matter was that Míla share had declined significantly during the lifetime of the analysis in the most important market areas in the country. On the other hand, Míla bitstream service had increased in the least economic parts of the country. The reason was mainly that service providers had in general not served those areas as they should do, as operation and service was more expensive there than at other locations in the country. These parties had therefore concentrated on the most economic areas of the country. Míla considered this to be clear in the light of the strong position of Míla and Siminn in such areas at the same time as Míla customers in the most economic areas of the country, where there was the highest expectation of profit on each connection, had decreased significantly.

The position of the PTA

Market share on the relevant wholesale market is dealt with in Section 8 here above and in the same section in the revised analysis (Appendix A), where the PTA conclusion is that Míla had SMP on the relevant markets. In the light of this conclusion and the competition problems described in Section 10.2 here above, and in the same section in the revised market analysis (Appendix A), the PTA considers it necessary to impose obligations on Míla copper local loops. The PTA is aware of service providers having been less than willing to provide service in the countryside, as they do not control the same infrastructure and are not in as strong a marketing position as the Siminn Group across the whole country. The PTA also considers it to be a normal approach by new parties on the market - as the marketing dominance of one party is established - to begin in the most economic areas, as it is likely that their costs per connection will be higher than with a party that has both economy of scale and scope.

Míla considers that the planned obligations did not harmonise with the role of legality in public administration legislation. Míla then specifically rejected that there were grounds for price obligations and price control by the PTA on fibre-optic, both on Market 3a and 3b. Míla considered that the specified obligations were unfounded, and not adequately investigated by the PTA, such as with regards to their necessity, the competition problems they were intended to resolve and whether there were not some lighter measures that could be used to achieve the same objectives. It was clear that the PTA bore the burden of proof that the conditions for imposition of burdensome obligations pursuant to article 32 of the Electronic Communications Act were in place, that the obligations were necessary and did not go further than necessary. This proof had in the opinion of Míla not been made.

The position of the PTA

Reference is made to the PTA answers above. The PTA has reviewed its position with respect to the obligation for cost analysed prices for access to fibre-optic local loops. The PTA proposes instead an obligation on the Siminn Group to the effect that the Group withstands an ERT test concerning the fibre-optic products of the Group in accordance with the recommendation for harmonised application of obligations for non-discrimination and for cost analysis.

Míla refers in a general manner and without further arguments to the planned obligation for cost analysed price for Míla fibre-optic not being according to the rule of legality, rule of investigation and principle of proportionality and that it had not been adequately argued. Furthermore, that it was not necessary or conducive to resolving a more specific competition problem. The PTA rejects these unfounded assertions but does agree with Míla that the ERT obligation is more in accordance with proportionality than the imposition of an obligation for cost analysed price of Míla fibre-optic, for the time being, as conditions are currently on the market.

Míla considered that the PTA Decision no. 21/2014 constituted rightful expectations for the company that price control obligations would not be applied to this fibre-optic during the lifetime of this analysis. It was established that such investments could in general not be written off in a shorter period than 20 years at the earliest. Míla should thus have expected

that price control obligations would not be imposed on the company fibre-optic. Míla could not see that the reasons had changed, certainly not significantly, since Decision no. 21/2014. Míla furthermore indicated the submission by the Administration to the Appellate Committee for Electronic Communications and Postal Affairs in connection with Míla appeal of Decision no. 40/2014, where the PTA had asserted that Míla had the power of decision with respect to pricing of fibre-optic local loops and could thus, with control of its prices, recoup for opex and capex. The grounds for the investment in question that Míla had made during recent years were completely removed if a price obligation was imposed. With reference to this, Míla considered that the planned obligation was not either in compliance with item c of paragraph 3 of article 27 of the Electronic Communications Act, to the effect that the imposition of obligations must among other things be justifiable, having taken into account the initial investment of the owner of the facility and the risk taken with the investment, nor with the principle of proportionality. Míla considered that the planned PTA decision could make the state liable for damages and reserves all rights in this respect.

The position of the PTA

Reference is made to the PTA answers above. The PTA has reviewed its position with respect to the obligation for cost analysed prices for access to fibre-optic local loops. The PTA proposes instead an obligation on the Siminn Group to the effect that the Group withstands an ERT test concerning the fibre-optic products of the Group in accordance with the recommendation for harmonised application of obligations for non-discrimination and for cost analysis.

In the opinion of the PTA, the Míla arguments did not hold with respect to lack of obligation. It is not possible to delay imposing a price control obligation for access to fibre-optic local loops until the investment is written off if circumstances are such on the market that it is deemed necessary to apply price control obligations. In the above specified PTA report to the Appellate Committee for Electronic Communications and Postal Affairs in connection with the Míla appeal of the PTA Decision no. 34/2014 where a universal services obligation was imposed on Míla, the PTA was simply describing the obligations then in force that the PTA had imposed on Míla with the PTA Decision no. 21/2014 sometime before. Such general discussion cannot of course prevent the imposition of obligations for the entire future.

With respect to Míla expectations for price control obligations not being imposed on the company's fibre-optic, the PTA points out that in PTA Decision no. 21/2014 it had been clearly stated that the main reason why the PTA did not impose a price control obligation on Mila fibre-optic local loops, had been that Míla was at a very early stage in its fibre-optic rollout at that time. The number of Míla fibre-optic local loops in use was [...] at the end of 2013 which is about [...] % of the total number of fibre-optic local loops in use which is [...] % of the total number of local loops in use. At this time, Míla's main emphasis was on VDSL deployment. It is not correct that these reasons had not changed very much. The number of Míla fibre-optic local loops in use at end of year 2020 was [...] which is a very large increase and represents about [...]% of the total number of fibre-optic local loops in use. The main Míla emphasis is now on deployment of fibre-optic local loops and one can expect that this proportion will continue to increase during the lifetime of the analysis.

It is also true that while there is no price obligation on fibre-optic local loops, Míla has the power of decision with respect to pricing of these loops, as long as other obligations are

respected that rest on the company, such as for non-discrimination, and other laws e.g., competition legislation. In price control obligations where cost analysed prices are applied, it is then expected that the cost of investments and operations will be recouped, with the addition of reasonable return on investment. In this way it is ensured that Míla recoups its investment during the lifetime of the analysis.

Míla referred to paragraph 1431 in the preliminary draft, where there was discussion on the necessity to impose a price obligation on Míla fibre-optic. Míla pointed out that cost analysed single price would put a stop to Míla development in areas where fibre-optic had not already been rolled out. This would mean that this obligation would have a negative impact on the development of fibre-optic connections at many locations in the country.

The position of the PTA

Reference is made to the PTA answers above. The PTA has reviewed its position with respect to the obligation for cost analysed prices for access to fibre-optic local loops. The PTA proposes instead an obligation on the Siminn Group to the effect that the Group withstands an ERT test concerning the fibre-optic products of the Group in accordance with the recommendation for harmonised application of obligations for non-discrimination and for cost analysis.

Tengir said that it supported the PTA plans to add a price obligation on Míla fibre-optic on the relevant wholesale market. Tengir placed great emphasis on the importance of this, as indications had emerged that the Siminn Group kept prices down or even practised subsidies/ predatory pricing on the relevant markets and thus significantly impaired the competitive grounds of independent network operators. In addition to this, Tengir emphasised the importance of the obligations where the PTA had reached the conclusion that they were necessary to ensure that the company in a dominant market position did not have the opportunity and incentive to discriminate between competitors in pricing.

Tengir confirmed the Míla behaviour that had been described and that had made it difficult for Tengir to gain a foothold on Market 3a in Húsavík. No changes have taken place in the arrangement there, despite regular requests from Tengir and Siminn customers in Húsavík on this matter.

The position of the PTA

Reference is made to the PTA answers above. The PTA has reviewed its position with respect to an obligation for cost analysed prices for access to Míla fibre-optic local loops. The PTA proposes instead an obligation on the Siminn Group to the effect that the Group withstands an ERT test concerning the fibre-optic products of the Group in accordance with the recommendation for harmonised application of obligations for non-discrimination and for cost analysis. The PTA opened national consultation on this new PTA approach and Tengir had the opportunity there to voice an opinion on the change, see Appendix C to this decision, but decided not to do so.

With respect to the Tengir reference to the behaviour of the Siminn Group in Húsavík, as described in the preliminary draft, it is clear that the situation there is unchanged on the basis of that description.

Vodafone stated that it fully supported the PTA plans to impose a price obligation on Míla fibre-optic. That was extremely important.

The position of the PTA

Reference is made to the PTA answers above. The PTA has reviewed its position with respect to an obligation for cost analysed prices for access to Míla fibre-optic local loops. The PTA proposes instead an obligation on the Siminn Group to the effect that the Group withstands an ERT test concerning the fibre-optic products of the Group in accordance with the recommendation for harmonised application of obligations for non-discrimination and for cost analysis. The PTA opened national consultation on this new PTA approach and Vodafone had the opportunity there to voice an opinion on the change, see Appendix C to this decision, but decided not to do so.

Vodafone referred to paragraph 1433 in the preliminary draft where it was stated that an obligation was imposed on Míla to provide VULA access to Míla fibre-optic which is based on PON technology if a reasonable request from an electronic communications company was made to this effect. VULA connections had not been realised with Míla as electronic communications companies had rather chosen to use Míla bitstream solutions in the form of Access Option 1 and Access Option 3. The Míla tariff for VULA service over fibre and copper local loops was decided in the PTA Decision no. 6/2017 on review of Míla wholesale tariff for bitstream access. In the light of the fact that there has been no demand for this service, the PTA considers it timely to require review of Míla cost analysis for VULA service, unless a reasonable request from an electronic communications companies was made for such service.

Vodafone says it will submit a request to Míla for VULA access. It was necessary to cost analyse the prices again, because answers have been very unclear, and it has been difficult to elicit them.

The position of the PTA

The PTA received the information from Míla that there was no demand for this product. In the PTA Decision no. 6/2017, prices for VULA on Mila copper network were decided. In national consultation, parameters for calculation of VULA tariff were among other things published in order that stakeholders could comment on individual parts of those calculations and the parameters on which they were based. Vodafone made no comments on the draft decision. The PTA encourages Vodafone to send a notification to the Administration if the company's access to the service is denied or if the company requests that the PTA review the tariff item in question.

Vodafone referred to paragraph 1438 in the preliminary draft, where it was stated that specific rules would apply to a network supported by the state or municipality, and in the PTA's opinion, these rules remained in place after the networks were sold. The PTA had the

authority to decide access prices for such networks with benchmarking, but obligations subsequent to market analysis could only be imposed on parties that had been designated as having SMP, i.e., Míla in this instance.

In the opinion of Vodafone, it was important that the PTA decided access price for Míla state funded networks with benchmarking.

Then Vodafone referred to paragraph 1439, where it was stated that the above could mean that another price might apply to Míla local loops that were deployed with state aid than to those that were deployed on market terms. Today, Míla collects charges according to general countryside tariff for its fibre-optic local loops that were deployed with state aid.

Vodafone asked what would apply to a company such as Orkufjarskipti.

The position of the PTA

During processing of the market analysis, the PTA investigated the monthly price of access networks owned by municipalities, Míla, GR, Tengir and others. In the analysis, access prices are published for those municipalities that replied to the PTA queries. The owners of state funded networks could use the access prices published there as a reference or seek advice from the PTA on pricing of such access in accordance with the state support rules. Those requesting access can also submit a complaint to the PTA if they consider that the access price of certain state funded networks is in excess of the cost of providing the service, having taken into account the state aid. For the time being, the PTA does not plan to decide unilaterally access prices for all state funded fibre-optic networks.

With respect to the Vodafone reference to Orkufjarskipti, the PTA is not aware that the company has received state aid from the Telecommunications Fund to deploy fibre-optic access networks. If the company had received such aid, the general state support rules apply to such networks. The company has on the other hand, received aid to deploy a trunk line network in Skógarströnd in Dalasýsla. The PTA also indicates that article 36 of the Electronic Communications Fund, on separation of concession activities from electronic communication activities, applies to Orkufjarskipti.

Míla refers to paragraph 1445 in the preliminary draft, where it is stated that the Míla copper local loop price was important for Míla competitors on the relevant market and on the downstream wholesale Market 3b. If the prices for the Míla copper local loop network were too low in the short or medium term, then this could distort the competitive position of independent, fibre-optic network players.

Míla considered that given experience in Iceland, this was not the reality. Míla considered it strange that the PTA should not investigate such assertions and whether they harmonised with Icelandic conditions. The fact was that by far the largest proportion of consumers switched immediately over to fibre-optic as soon as they could. Míla challenged the PTA to examine the behaviour of consumers on the basis of data, such as from surveys, instead of taking things as given or asserting something without any data whatsoever.

The PTA commissioned a consumer survey to examine consumers' opinions, in addition to having gathered detailed information from Míla on the switching of consumers from copper over to fibre-optic and from GR regarding the transfer of consumers from the company's fibre-optic network to copper. In this data, it is seen that a significant proportion of such consumers switch quickly to fibre-optic, i.e., within one year. This however does not apply to all consumers, as a significant proportion of them appear to continue to remain faithful to copper local loops, even when fibre-optic local loops are deployed to their homes. Furthermore, there has been considerable progress in recent years in consumer switching from GR fibre-optic network to Mila copper network.

When consumers are given the option by their service providers of choosing between copper local loops with VDSL service or fibre-optic local loops, it is understandable that the fibre-optic local loop will more often be chosen if the service is at the same price for the consumer as the fibre-optic connection offers more speed. If switching to fibre-optic local loop means that a party has to switch service providers, there are many who decide not to switch despite the fact that the monthly price could be the same. Consumers are reluctant to switch service provider if the current product fulfils consumer needs. Míla and Siminn have long pointed out that Ljósnet (VDSL connection) fulfils all household needs and that there is no need for fibre-optic to fulfil these needs. It was shown in the consumer survey that 79% of those questioned had not switched Internet service provider during the preceding 12 months, and of those, 64% had not switched service provider during the previous 3 years. It was also shown in the survey that the main reason for switching service provider was price. Míla's main customer is Siminn, and one can read from the survey that Siminn customers are more reluctant than customers of other service providers to switch service provider, and the proportion of those that leave Siminn of those that have switched service provider is lower than the amount of the company's market share. It is therefore absolutely not the case that consumers react quickly and switch on a large scale from Míla VDSL to fibre-optic of a Míla competitor, if that means that they need to switch service provider.

Service providers have an impact on choice of underlying network that their customers are offered. The fact that some service companies have not decided to use the Míla Ljósnet (VDSL), where fibre-optic is available from Míla competitor, can have various explanations. The explanation could for example be attributed to Míla being owned by their largest competitor and that Míla does not enjoy their trust despite measures that were introduced with the Settlement between the Siminn Group and the CA in 2013, which was reviewed in 2015. This does not at all exclude that service providers will increasingly use the Míla Ljósnet, instead of fibre-optic of a competitor of the Siminn Group, if that is economically advantageous for these parties.

A lower price for copper local loops compared to fibre-optic local loops could therefore act as an incentive to rather choose Míla Ljósnet than fibre-optic local loops on offer, and this increases the risk of investments in fibre-optic. This option is available and if there is a large price difference, then the option is attractive for service providers, given charges that electronic communication companies have generally collected in retail. Now the retail price for copper and fibre-optic local loops is the same with the largest service providers. If the retail price of fibre-optic local loops increases in comparison with the retail price for copper local loops (Ljósnet), then it could be that some end users will choose Ljósnet instead of fibre-

optic. As stated here above, it is mainly the price that causes a considerable proportion of consumers to consider switching service, rather than issues such as speed/capacity of a connection.

Míla referred to paragraph 1449 in the preliminary draft, where the PTA pointed out that the Administration was small and could therefore not make a BU-LRIC+ cost analysis.

Míla stated that the small size appeared however not to affect Míla or the Icelandic market in other respects. The PTA would not hesitate to impose substantially burdensome obligations (costing hundreds of millions) on Míla, regardless of the fact that in international comparison, Míla was a small company on a very small market. Míla proportional costs from PTA obligations were thus many times higher than is generally the case elsewhere. Míla considered that the PTA was not taking sufficient care to ensure that obligations imposed were proportionately correct, given the Icelandic micro-market, but seemed to choose obligations that went furthest in each country in Europe as a model, and impose them on Míla.

The position of the PTA

Reference is made to the PTA answers above. The PTA has reviewed its position with respect to the obligation for cost analysed prices for access to fibre-optic local loops. The PTA proposes instead an obligation on the Siminn Group to the effect that the Group withstands an ERT test concerning the fibre-optic products of the Group in accordance with the recommendation for harmonised application of obligations for non-discrimination and for cost analysis. The PTA will, however, continue to stipulate a cost-analysed price for Mila copper local loops, but the company has for years carried out such a cost analysis of the product that the PTA has reviewed.

The PTA expects that a company like Míla will carefully record costs in its bookkeeping system and calculate the cost behind the products and service that the company offers. The PTA considers that the obligations that are now imposed on Míla, are in accordance with the conclusion that a detailed analysis of conditions on the market has demonstrated and are deemed necessary by the Administration to support improved competition on these markets. The ERT obligation in question also harmonises better with the EU Commission recommendation, and the obligation for cost analysed prices of Míla fibre-optic networks, as will be explained in more detail in Appendix C.

Míla's assessment was that the planned obligation for "same price across the whole country" would lead to efficient development in the areas where most urban areas were situated, and where competition was effective, would subsidise uneconomical development elsewhere. Such an obligation would diminish Míla's competitiveness in competitive areas and thus reduce the incentive for investment in less economic areas.

As of today, the company has deployed fibre-optic to about 30-35% (about 25,000 of about 88,000) addresses in the country and this on its own should show that now would not be the proper time to diminish incentives for development. The areas that remained to have fibre-optic roll-out were "difficult" areas where there was only 1.1 space on average for each

address. There was therefore little incentive to deploy fibre-optic to these addresses because of the costs and even less if single price was imposed.

If the PTA imposed the planned impositions on Míla, then Míla would not embark on the development needed except with a grant from the state or municipalities, or with high start-up charges. On the other hand, start-up charges were not feasible because of market conditions in competitive areas, where they were not common practice. This meant that Míla was de facto excluded from developing new fibre-optic systems outside competitive areas. Míla thus considered that the objective of the authorities for development in difficult areas would not succeed if an incentive for investment was specifically removed with these PTA measures.

Míla finally pointed out that infrastructure development was an investment for decades and it was therefore very serious if the authorities changed the basis for developing such systems at intervals of a few years, and thus removed at the same time, the basis for investments already made.

The position of the PTA

Reference is made to the PTA answers above. The PTA has reviewed its position with respect to the obligation for cost analysed prices for access to fibre-optic local loops. The PTA proposes instead an obligation on the Siminn Group to the effect that the Group withstands an ERT test concerning the fibre-optic products of the Group in accordance with the recommendation for harmonised application of obligations for non-discrimination and for cost analysis.

Míla maintains that the company had only deployed fibre-optic networks to about 30-35% of addresses in the country. The truth of the matter is that at the end of 2020 this proportion was at least 47% of homes and companies in the country, and one could expect this to increase significantly during the lifetime of the analysis. Then the PTA pointed out that it was not out of the question that further state aid would be provided for development of fibre-optic networks at many locations in the countryside during the lifetime of the analysis or that electronic communication companies start collecting higher start-up fees.

Míla considered that single price for the whole country would also result in Míla needing to absorb all investment costs, for example in copper which was on the way out, and its use would rapidly decrease. In addition to this, price changes were slow to implement, such that the price was fixed, despite major changes in the underlying parameters. Míla appears for example seem to be required to collect according to tariff where copper investment was included, despite the fact that it had been decommissioned. The planned obligation for price changes would be according to index, which would also result in the price being fixed though the underlying parameters had changed and there was no latitude for changes with reference to the correct parameters.

The PTA intention to impose price obligations both for fibre-optic and copper and single price across the whole country, would result in Míla alone needing to bear the cost of universal service, without having the possibility of a grant from the universal services fund.

Reference is made to the PTA answers above. The PTA has reviewed its position with respect to the obligation for cost analysed prices for access to fibre-optic local loops. The PTA proposes instead an obligation on the Siminn Group to the effect that the Group withstands an ERT test concerning the fibre-optic products of the Group in accordance with the recommendation for harmonised application of obligations for non-discrimination and for cost analysis.

With respect to potential linking of price changes with the index, then this is considered as a positive step for Míla, if there are delays in cost analysis. The PTA considers that annual revisions of cost analyses are not realistic, but it is planned to reduce the frequency of analysis from the existing practice.

In price control obligations where cost analysed prices are applied, it is expected that the cost of investments and operations will be recouped, with the addition of reasonable return on investment. In this way it is ensured that Míla can recoup its costs and does therefore not need to apply to the universal services fund.

Míla referred to paragraph 1454 in the preliminary draft, where there was discussion on monthly price for Mila copper local loops and the possible consequences of lower access prices of copper local loops. Then it was stated that the increase in monthly prices for Mila copper local loops had been below price changes and had not followed development of prices for other fibre-optic local loops. In the opinion of the PTA, the low monthly price of copper local loops could be conducive to decelerating the uptake of fibre-optic local loops and it was thus no less important for this to be monitored than to prevent excessive pricing. For these reasons, the PTA intended to discontinue the procedure that was used in the PTA Decision no. 5/2017 and 8/2019 of including an investment projection in the investment base. This was done to mitigate the impact of the decreasing number of leased copper local loops with consumer interests as a guiding light. Because of retail increases in the access price of local loops (line charge), this had on the other hand, not been passed on to them. In the opinion of the PTA this approach could lead to the price of copper local loops being too low in comparison with other local loops. In addition to this one had to take into account that a local loop price that was too low, given Míla costs, could create a precedent for an allocation from the universal services provision in the future. It would be better if Míla was able to collect its costs with local loop charges from those who use the service than to apply for an allocation from a provision was which was funded by electronic communications companies.

Míla considered that in paragraph 1292, it was stated that it was damaging for competition on the retail market if prices in areas subject to obligations were not subsidised by areas not subject to obligations. Here on the other hand, the PTA comes to the conclusion that low monthly prices for copper local loops hindered competition in fibre-optic systems. Here the PTA should examine development on the Icelandic market. The majority of consumers would switch to fibre-optic in such areas within a few years. This, therefore, did not fit the reality.

The PTA was also concerned that electronic communications companies that were only operating in economic areas, would have to absorb part of the cost of subsidising uneconomic areas. The PTA on the other hand, seems not have such concern for Mila, which all things being equal would have to transfer costs from expensive areas in the countryside to

competitive areas where the trend was that Míla market share would become lower than that of the competitor.

Míla also pointed out, that the company needed to pay independent fibre-optic companies (Tengir and Snerpa) a separate charge to have access to their local loops. It cannot be fair and normal that Míla needed to lease local loops from other parties at a higher price than the company could collect from electronic communication companies that used them. Míla had applied for a contribution from the universal service fund but had not been successful. It was therefore clear that it was very unlikely that the company could turn to this fund. It is appropriate to point out that the main reason for there having been a loss on local loops was that cost analysis and decisions of the PTA took far too long and circumstances were usually quite different when the decision was finally published, from what was shown by the cost analysis.

Míla protested about the PTA intention to reject that the investment projection should be included in the investment base for calculation of local loop price. The lease price for local loops should cover their cost at any given time. The practice of always including historical cost and historical quantities in the calculation would lead to a wrong price, as at the time when the tariff comes into force, revenue would be different than assumed at the start, as the amount sold would be other than in the cost model and this also applies to investments. It was therefore important that this should be taken into account in the case of service that was growing or, as appropriate, declining.

The PTA has expressed concerns that the price development of copper local loops has not followed price index development nor the price development of fibre-optics of other parties and was afraid that this would lessen the incentive for people to switch from copper to fibre-optic. This was a total fabrication and not in touch with reality. Electronic communications companies appeared to emphasise providing service over fibre-optic local loops, despite the fact that copper was much cheaper and end users chose fibre-optic in about 90% of new connections.

The position of the PTA

In paragraph 1292 reference is made to the BEREC joint position on geographic aspects of market analysis from 2014. The discussion there is on *potential* consequences of lifting obligations in specific areas. In paragraph 1454, there is discussion on potential consequences of the price for copper local loops being too low. The PTA refers to its prior answer to Míla's comments on paragraph 1445 in the consultation document, here above, with respect to the potential impact of the price for copper local loops being too low.

With respect to Míla's comments on PTA's concerns, "that electronic communications companies that were only operating in economic areas, would have to absorb part of the cost of subsidising uneconomic areas", the PTA points out the difference between wholesale price of copper local loops and the Siminn line charge, where Siminn is the largest purchaser of copper local loops. In April 2020 this difference was ISK 1257/month (ex VAT) for each local loop (80% markup). In the opinion of the PTA there is no need to keep prices down on copper local loops in wholesale with contributions from universal service, as the wholesale price of copper local loops is clearly not too high given the retail price on offer. In the opinion of the PTA, it is not at all normal that all electronic communications company are charged an

additional contribution to the universal service fund for the simple purpose of those companies offering copper local loops in retail being able to increase their profit with increased markup on the local loop charge.

With respect to local loops of Tengir and Snerpa, the PTA points out that obligations on Market 3a only apply to Míla local loops. The PTA raises no objections to Míla reselling the local loops of other parties with a reasonable markup, as Míla has done up to this point in time.

Míla attributes loss from local loops to cost analysis taking too long in processing by the Administration. The PTA points out that it is a wrong assertion by Míla that the processing time of cost analysis has caused a loss in Míla operations. The fact is that in 2019, Míla EBITDA amounted to about ISK [...] which represents about [...]% of revenue from local loops, which is far in excess of what is returned by other departments in that year, according to the company's separation of accountancy.

Míla has, on the other hand, also proposed to apply a projection for investments, which support lower local loop price and thus potential additional loss from local loop lease. It is difficult to understand what Míla wants in this connection. In order to make concessions to Míla comments on the long time between revisions of cost analyses and to reduce the burden on Míla in making cost analyses, the PTA proposed in the draft that cost analyses be revised regularly on the basis of indexation. It should also have a reasonable impact on the market if there were a certain foreseeability. As the requirement is made in the electronic communications regulatory framework, that recouped costs are on the basis of efficiently operated electronic communications systems, the PTA makes a requirement for efficiency in these revisions. The PTA takes into account increases in Míla local loop prices in its decision on a requirement for efficiency.

With respect to the Míla demands that an investment projection is included in the investment base for calculating local loop price, the PTA considers that such a methodology would create too much latitude for Míla to decide the price without consideration of underlying costs, whether this is for the purpose of lowering or increasing unit prices.

Míla referred to paragraph 1455 in the preliminary draft, where it is stated that the PTA plans to decrease the frequency of review of tariff as presented in the last market analysis. The time it takes to conduct a market analysis varied and for this reason it would not always be possible to follow the timeframe that had been set up. In order to increase predictability and stability in local loop prices and to lessen the workload on the Administration and on Míla, the PTA intended therefore to decrease the number of overall reviews of Míla tariff for local loops. Instead, the PTA intended to have the tariffs updated annually (1 January) using index development less the annual efficiency requirement between those times when the tariff is reviewed with new financial information. The PTA considered it appropriate to use the building index in this connection. The tariff shall, all things being equal, be reviewed at 2–3-year intervals and with each decision on new wholesale prices, a period of notice shall be decided for Míla to submit a new cost analysis. When reviewing a tariff, a new annual efficiency requirement shall be decided at the same time.

Míla considered it important to calculate price on the basis of real circumstances on the market. As stated in the PTA analysis, there were very significant changes on the local loop market and it was therefore far too burdensome to not have latitude to submit new prices, regardless of indexation increases, if circumstances should change.

The position of the PTA

The PTA points out that the requirement for basing prices on cost is not being lifted, but rather that Míla is assured more frequent revisions of the tariff than is now the case. Cost analysed prices will come into force when they are ready and replace prices that have been set in accordance with an indexation increase.

Míla refers to paragraph 1456 in the preliminary draft, where it is stated that the PTA plans to apply a 2% efficiency requirement.

Míla requested an explanation of the basis on which the efficiency requirement was calculated.

The position of the PTA

The PTA took into account average increases of copper local loops per annum from 2014 to 2020, as the last market analysis came into force in 2014. The PTA compared this increase with annual increase in the building index per annum during the same period. The PTA plans to review the efficiency requirement when the local loop prices are reviewed, subsequent to cost analysis.

Míla referred to paragraph 1457 in the preliminary draft, where it was stated that the annual index update, including the efficiency requirement, should take place and be in force until a reviewed tariff was ready and had been endorsed by the PTA.

Míla pointed out that it was some considerable time since prices changed last. Míla was given the option of updating the tariff for copper local loops, which the company considered necessary, before market analysis came into force.

The position of the PTA

In accordance with the Mila comments, the PTA has requested an update of the Mila cost analysis and Mila has notice until 1 June 2021 to submit cost analysis for Markets 4, 5 and 6/2008. One may therefore expect new prices to come into force in the first part of 2022, subsequent to scrutiny by the PTA of the cost analyses, to national consultation and to consultation with ESA.

Vodafone refers to paragraph 1459 in the preliminary draft, where it is stated that the monthly lease now in force for access to Míla local loops was the following: Míla tariff for access to fibre-optic local loops, price ex VAT: Greater Capital City Area (Borgarnes – Selfoss, but not country areas) and Akureyri ISK 1970/month. Country area ISK 2,300/month

Vodafone asked whether this applied only to homes are not companies, and whether the same should apply to homes and companies.

The position of the PTA

The PTA does not plan to impose price control on access to Míla fibre-optic local loops and will therefore not decide the structure of Míla tariff for fibre-optic local loops. In this paragraph the discussion is on home connections. The Siminn Group has nevertheless to withstand an ERT test concerning the fibre-optic products of the Group.

The PTA directs a request to Vodafone that the company request that Míla explain its tariff and submit comments to the PTA if Vodafone considers that obligations on access, non-discrimination or transparency are broken by Míla.

There will only be price control on Míla backhaul fibre lines (terminating segment of leased lines) in accordance with current practice. Furthermore, there will be a price obligation on the Mila Fibre line which are used for companies, and as is stated in the PTA additional consultation, the Administration considers that those connections are not a part of Market 3a.

Vodafone referred to paragraph 1465 in the preliminary draft, where it was stated that the PTA had given an exemption from an obligation on Míla on access to sub loops, if Míla should offer virtual network access (VULA) to copper local loops. Míla tariff for VULA access was: Start-up charge ISK 4,200,000, VULA, access charge, per month ISK 70,000, VULA monthly charge, per connection ISK 79.

Vodafone noted that there was no one using this product except Míla itself. Vodafone had never purchased it.

The position of the PTA

The PTA thanks for this information and requests that Vodafone submit a formal submission if the company considers that Míla has breached an obligation to provide access. In the PTA Decision no. 6/2017, prices for VULA were decided. In national consultation, parameters for calculation of VULA tariff were among other things published in order that stakeholders could comment on individual parts of those calculations and the parameters on which they were based. Vodafone made no comments on the draft decision. Should the PTA receive information that Vodafone formally requested such access from Míla, the PTA will request that Míla send a revised cost analysis to the Administration, for review and endorsement.

Míla referred to paragraph 1472 in the preliminary draft, where there was discussion on how costs should be decided for access to ducts. The PTA had there among other things, referred to paragraph 34-36 in an EU Commission recommendation from 11 September 2013 on the implementation of harmonised non-discrimination obligations and cost analysis methodologies. There it was stated among other things that the decision on costs should be based on book price of assets less accumulated depreciation and one should therefore not include in the cost base fully depreciated assets that were still in operation. It was also stated

there that if data were not sufficiently reliable as a basis for calculation, this price should be decided on the basis of a benchmark.

Míla said it had informed the PTA that it was very difficult to extract real costs directly from the Míla bookkeeping system, for laying ducts. Míla considered it more correct and normal to use the replacement cost of ducts. Míla referred, in other respects to a letter to the Administration that was sent on 8 April 2020.

The position of the PTA

As stated in paragraph 1473 in the consultation document, the PTA can conduct benchmarking if sufficient information is not available to decide price from historical cost. The PTA is now processing a cost analysis from Mila for this product category, and one can expect the Administration's conclusion later in 2021.

Míla referred to paragraphs 1477 and 1452 in the preliminary draft, where there is discussion on changes in the local loop market, where copper local loops were decreasing in number while at the same time investments were made in fibre-optic connections. This could mean that the historical cost model returned high monthly prices for copper local loops. In the opinion of the PTA, it was necessary to aim for a single local loop price independent of technology, as in the retail market.

Míla objected to the PTA plans for single price for fibre and copper. This would cause significant damage on the market where there was already considerable competition, given that it is an infrastructure market. In the opinion Míla, copper and fibre-optic did not belong to the same market in the minds of consumers, and Míla did not have market dominance on the market for fibre-optic.

Míla furthermore pointed out that the company had varying prices for PON fibre-optic for bitstream service, both dependent on area and type of service. There were thus for example other design requirements used for GPON connections in commercial districts than in residential districts. The reference was thus a maximum of 32 active connections in commercial districts and up to 64 homes. Commercial districts were also often such that there were longer distances between buildings and fewer users per square kilometre, which meant that the cost of deployment was higher than deploying to homes. Míla also absorbed a higher charge for Ljósnet to companies, particularly if they were deployed to order. Finally, there is the fact that there were other service criteria on company connections than on home connections, and work was done on such connections outside the normal opening hours of companies. The work was thus done early in the morning or in the evening. Such work was specifically recorded per company, while this was not done for homes.

The position of the PTA

Reference is made to the PTA answers above. The PTA has therefore reviewed its position with respect to an obligation for cost analysed prices for access to Mila fibre-optic local loops and will edit the preliminary draft accordingly. The PTA proposes instead an obligation on the Siminn Group to the effect that the Group withstands an ERT test concerning the fibre-optic products of the Group in accordance with the recommendation for harmonised application of obligations for non-discrimination and for cost analysis.

The PTA reiterates that the Administration considers that there is still substitutability between copper and fibre-optic local loops, and refers to Sections 3 and 4 here above, to the same section in the revised market analysis (Appendix A) and Appendix C.

Míla said that one should see the company's report, comments to individual paragraphs in the preliminary draft and the report from Analysys Mason from 1 July 2020 as a single entity.

Analysys Mason pointed out that one single price for fibre and copper local loops would probably be higher than the current price for copper local loops, for example because the copper network was written off to a large extent, while the fibre-optic network was mostly new. This could result in higher price for copper local loops in rural areas for those parties that did not have access to fibre-optic local loops, even if that price would probably meet real unit costs in those areas. This was not desirable from the point of view of objectives of the regulatory framework. It would appear that rural areas (that had not received fibre-optic rollout) were subsidising urban areas (that had the advantage of fibre-optic rollout).

The position of the PTA

Reference is made to the PTA answers above. The PTA has reviewed its position with respect to an obligation for cost analysed prices for access to Míla fibre-optic local loops and will edit the preliminary draft, in accordance with that. The PTA proposes instead an obligation on the Siminn Group to the effect that the Group withstands an ERT test concerning the fibre-optic products of the Group in accordance with the recommendation for harmonised application of obligations for non-discrimination and for cost analysis.

Míla said that one should see the company's report, comments to individual comments on the preliminary draft and the report from Analysys Mason from 1 July 2020 as a single entity.

Analysys Mason pointed out that even though some kind of surveillance of price for fibre-optic local loops was considered necessary, it was not necessary to impose a price obligation on fibre-optic local loops. ERT was a realistic choice. Retail prices were already competitive, which meant that consumers were already receiving the benefits of efficient pricing. Both Ireland and Luxembourg were examples of countries that had imposed ERT, or conditions for "no margin squeeze", rather than imposing a cost analysis obligation on fibre-optic local loops.

The position of the PTA

Reference is made to the PTA answers above. The PTA has reviewed its position with respect to an obligation for cost analysed prices for access to Míla fibre-optic local loops and will edit the preliminary draft, in accordance with that. As was stated in the PTA additional consultation on 30 October 2020, the Administration plans instead to impose an obligation that the Siminn Group withstands an ERT test concerning the fibre-optic products of the Group in accordance with the recommendation on harmonised application of obligations for non-discrimination and for cost analysis methodologies to support competition and strengthen investment in NGA networks.

With respect to the assertion by Analysys Mason the retail prices are competitive, the PTA points out that there are indications that competition in retail is limited, such as the high Siminn market share indicates. In its comments in the additional consultation, the Competition Authority (the CA) pointed out that there were indications that competition was significantly limited in retail for local loop access when one considered the fact that there had been little or no price competition in line or access charges in recent years. With respect to retail of Internet service with Siminn and other retail companies, there seemed furthermore to be no distinction made in the tariffs of these companies to consumers as to whether retail service was delivered with fibre-optic technology or through an xDSL connection on the copper network. The retail price of Internet connections appeared thus to always be the same regardless of the technology of the access system, or local loop, in this specific context.

Míla said that one should see the company's report, comments to individual paragraphs in the preliminary draft and the report from Analysys Mason from 1 July 2020 as a single entity.

Analysys Mason referred to paragraph 1265 in the preliminary draft with respect to the PTA arguments for imposing a price control obligation, i.e., to strengthen competition on the relevant market and on underlying markets, thus ensuring interests of consumers. Analysys Mason considered that a price ceiling would probably not have this impact, mostly because the market already had effective competition and service providers already purchased substantially from GR and Tengir. Unnecessary price control on Míla fibre-optic could in fact damage competition and interests of end users. In competitive areas, cost analysed prices could lead to higher or lower prices than those that were in force.

A lower price could appear to be advantageous for consumers but would not be advantageous for GR or Tengir. This could lead to a greater market share from Míla if service providers switched to Míla because of low prices and raise barriers to new parties entering the market.

On the other hand, if cost analysis returned higher wholesale prices, this could lead to a reduction in the Míla market share, by encouraging service providers to switch to GR and Tengir, which would lead to a higher unit prices from Míla and potentially force Siminn to increase its retail prices. AM did not believe that higher prices that were set only bring about a price obligation had a positive impact for consumers on the market for fibre-optic, which was a competitive market for 40-50% of Icelandic homes and companies.

The position of the PTA

The PTA points out that the conclusion of the PTA market analysis is not that there is effective competition on this market in this country.

The PTA has therefore reviewed its position with respect to an obligation for cost analysed prices for access to Míla fibre-optic local loops and will edit the preliminary draft accordingly. The PTA proposes instead an obligation on the Siminn Group to the effect that the Group withstands an ERT test concerning the fibre-optic products of the Group in accordance with the recommendation for harmonised application of obligations for non-discrimination and for cost analysis.

11 Imposition of obligations on the wholesale market for central access provided at a fixed location for mass-market products (Market 3b)

The Competition Authority (the CA) said that it agreed with the PTA about the obligations that the Administration intended to impose on Míla on the relevant wholesale markets.

The position of the PTA

The position of the CA generally supports the planned imposition of obligations, but one must have in mind that comments refer to obligations as they were described in the preliminary draft. Reference is made to discussion on the same type of comment in Section 10.

GR stated that it agreed with the PTA planned imposition of obligations on Míla on Market 3b.

The position of the PTA

The position of GR generally supports the planned imposition of obligations, but one must have in mind that comments refer to obligations as they were described in the preliminary draft. Reference is made to discussion on the same type of comment in Section 10.

Tengir said that it agreed with the PTA on maintaining the obligations on Míla on Market 3b, as they were both normal and necessary in the opinion of Tengir. Tengir also supported PTA plans for imposition of wider obligations on Míla.

The position of the PTA

The position of Tengir generally supports the planned imposition of obligations, but one must have in mind that comments refer to obligations as they were described in the preliminary draft. Reference is made to discussion on the same type of comment in Section 10.

Nova considered it a matter of course that obligations also covered Míla bitstream solutions on fibre-optic networks, as there was total substitutability between service provided over copper and fibre-optic networks.

The position of the PTA

The Nova position generally supports the planned imposition of obligations, but one must have in mind that comments refer to obligations as they were described in the preliminary draft. Reference is made to discussion on the same type of comment in Section 10.

11.1 In general on obligations

No comments were received on this Section.

11.2 Competition problems

11.2.1 General

GR considered that it had experienced various competition problems in competition with Míla, and particularly in the light of the strong market position of Míla on Market 3a, as on other markets, as the Siminn Group had repeatedly breached competition law, most recently with respect to English football, see Decision no. 25/2020 and breaches against paragraph 5 of article 45 of the Media Act, which was confirmed with the judgement of the District Court of Reykjavík on 1 July 2020. In the light of the above, it was reasonable to take into account the number of paragraphs in the market analysis draft that further demonstrated the Siminn Group market strength, see paragraphs 1168, 1183, 1189 and 1241. Because of this, it was appropriate to specifically assess obligations that rested on the parties with market dominance and to specifically examine the markets to which products and services belonged and that Míla could not present them as it suited Míla, see complaint from GR to the PTA about pricing of GPON against Ljósnet.

The position of the PTA

The GR comment supports the PTA analysis of competition issues and the imposition of obligations. The PTA agrees about the importance of carefully examining the markets to which specific products belong. The PTA has retracted the intention to allocate Míla Ljósnet to Market 3a, so they will continue to belong to Market 6, and in all likelihood belong to Market 4 when an analysis of that market is made. With respect to purchase by companies of GPON connections, the PTA considers that there could be problems in moving connections that are designed for homes on Market 4, though they are purchased by companies, if they do not have the value-added elements that are used in the definition of Market 4.

The paragraphs that to which GR refer specifically here above, belong to Market 3a, and a similar comment was answered in Section 10 here above. Reference is made to this.

11.2.2 Competition problems on the relevant market

No comments were received on this section.

11.2.3 Vertical integration and transfer of SMP

Tengir referred among other things to paragraphs 1503-1509 in Section 11.2.3.2 in the preliminary draft which discusses pricing.

Tengir emphasised the importance of this paragraph, i.e., with respect to indications that the Siminn Group kept prices low or even practised subsidies or predatory pricing on Markets 3a and 3b and thus significantly impaired the competitive grounds of independent network operators.

The discussion in the paragraph in question is in general about how a company with SMP can leverage vertical integration. With respect to potential predatory pricing, the PTA refers to an answer to comments on Section 10.2.5. here above.

11.2.4 Problems related to assessment of SMP on the relevant market

No comments were received on this section.

11.2.5 Further on competition problems related to 3b in this country

Tengir confirmed the Míla behaviour described in paragraphs 1540-1545 in the preliminary draft that had made it more difficult for Tengir to gain a foothold on Market 3a in Húsavík. No changes have taken place to the arrangement there, despite regular requests from Tengir and Siminn customers in Húsavík on this matter.

The position of the PTA

The PTA discusses this in sections 10.2.5.4 and 11.2.5.4 in the revised market analysis (Appendix A) and in addition to this, a similar comment by Tengir has been answered in Section 10 here above. Reference is made to this. It is pointed out that the case has not come to the PTA for formal processing, so the description of events must be with that reservation, and in addition to this the views of the Siminn Group that have been submitted to this consultation, will be referred to.

Tengir referred to paragraph 1564 in the preliminary draft, where it is stated that Tengir agreed with the GR views in the main, and considered that the Siminn gross profit from line charge was abnormally high and that there was a question of whether the Siminn Group were leveraging their size to restrain Tengir growth in the company's operational territory with abnormally low wholesale Míla prices, and had thus managed to embark on projects, e.g. in Akureyri, where commercial grounds were not in place.

Tengir furthermore referred to paragraph 1572, where it was stated that the PTA considered it not inconceivable that the Siminn line charge had been increased in recent years and at least partly been used to support extensive and costly Míla fibre-optic development. It was clear that the Siminn Group benefited from having the possibility of using its vertical integration in a manner that other electronic communications companies in this country did not have at their disposal. In addition to this, such an incentive did exist, though it would not be decided here whether such abuse had taken place. Cross subsidies in pricing between wholesale and retail were among the risk factors for competition under such circumstances.

Tengir emphasised the importance of this paragraph, i.e., with respect to indications that the Siminn Group kept prices low or even practised subsidies or predatory pricing on Markets 3a and 3b and thus significantly impaired the competitive grounds of independent network operators.

The PTA refers to the Administration's answers here above in Section 10.2.5 on paragraphs 1224 and 1232 in the preliminary draft, where there is discussion on the considerations that are expressed in the above specified Tengir comment.

Nova referred to paragraph 1555-1559 in Section 11.2.5.2 in the preliminary draft, which discussed the impact of the strong Míla position on the operations of smaller local networks. Nova stated that Míla was doubtless capable of operating those networks that had been developed by smaller parties. It was however amazing how non-transparent the process was, i.e., providing for operation and/or selling to Míla the infrastructure that these parties had developed. It seems that a call for tender process or something similar was not needed for the networks to be handed over to Míla for the long term. The silence in which this "transfer" took place was remarkable. For the long term, it cannot be positive for competition if almost all infrastructures end up in operation or ownership of one and the same party.

In the opinion of Nova, it was clear that the Míla network with national coverage would be among the infrastructures that made Míla's position unique when the purchase and future operation of such networks were calculated for profitability. It was very important that access of other parties to for example the NATO cable, could be in such a manner that it would be possible to compete with Míla/Siminn at more locations in the country. This was a basic prerequisite for potential competition from other parties.

The position of the PTA

Reference is made to an identical comment from Nova to paragraphs 1192-1193 in Section 10.2.5 here above.

Nova referred to paragraphs 1530-1533 in Section 11.2.5.5 in the preliminary draft, that discusses matters related to TV service and other retail service. Nova indicated very detailed discussion on bundling and on agreements for the sale of English football, which were described in the CA Decision no. 25/2020.

The position of the PTA

The PTA refers to discussion on a comparable comment from Nova to paragraphs 1185-1189 in Section 10.2.5 here above.

Nova referred to paragraphs 1560-1582 in Section 11.2.5.6 in the preliminary draft, that discusses Siminn Group pricing policy in wholesale and retail. Nova considered that there was much that indicated that cross subsidies were being used. Changed obligations could change pricing that could possibly limit the risk of such behaviour. Reference is here mainly being made to changes where investments for development of Míla fibre-optic (and Míla purchase of fibre-optic networks) would be included in the cost base for assessment of prices. In the opinion of Nova, this could result in an increase in Míla local loops and a changed division of revenue between Míla and Siminn. This change should not need to increase the

price to consumers, but Siminn's excessive markup in retail should rather be adjusted. This could change the position of those that competed with Míla in wholesale.

Then one could mention that Siminn had not only been increasing the retail price of the line charge, but voice telephony, where Siminn had very strong dominance, has increased very significantly. Nova considered it to be likely that Siminn would leverage its strong market share in voice telephony to subsidise, for example, entry offers to new customers. In this way for example, Siminn increases in the tariff for voice telephony on 1 February 2020 had few other arguments to support it, and Siminn then increased for example, the monthly charge to customers in the subscription option "ISK 0/minute" by more than 13%. There was also a Siminn increase in voice telephony on 1 December 2019, when Siminn had increased the start charge for voice telephony from ISK 15 to ISK 17.

Nova considered that in these increases, Siminn had on the one hand been taking more revenue from customers that still used voice telephony and that had little option of anything other than Siminn, and also encouraged use of the subscription option "ISK 0/minute", and this option was part of the Siminn Heimilispakki (Home Package) and therefore free there. One could therefore consider it likely that the purpose of the increase had been to make yet another incentive for customers to rather purchase the Siminn's Heimilispakki (Home Package) than separate services. In other words, with an increase in the price of the service when it was purchased as a single item the Heimilispakki (Home Package) was made more attractive and there was greater inconvenience for customers who purchased separate services.

Siminn thus used the voice telephony market to protect its strength and position vis-à-vis existing customers where, through its voice telephony transactions, it had good access to customers. In this respect, the market was important and valuable for Siminn, despite the fact that Siminn spoke of the market as "dying". Siminn revenue from the "dying market" in question was still about ISK 1.5 billion per annum where customers using this service with Siminn had only decreased by about 11,000 since 2014. Since 2014, total Siminn revenue from this market had probably been about ISK 13 billion, and one could assume that gross profit had been very good as the service was based on old technology and as the new technology that was taking over was based on much less expensive solutions than the older technology.

The position of the PTA

The PTA referred to comments in Section 10.2.5 here above with respect to paragraphs 1220-1242 in the preliminary draft. The PTA had in that instance answered analogous comments from Nova.

Míla referred to paragraph 1574 in the preliminary draft where there was discussion on market development from copper local loops to fibre-optic local loops and on unchanged PTA price obligations, that only covered copper local loops, to the effect that they would have increasingly less impact as this development progressed. Míla pointed out that price obligation on copper had little impact on the market, which strongly indicated that copper was not a substitute product for fibre-optic. Otherwise, a price obligation on copper should precisely have an impact on purchasing behaviour on the market.

As has been stated, Míla has SMP on this market. Míla has significantly increased investment in bitstream service over fibre-optic local loops, and bitstream service over fibre-optic is thus growing in the Míla product offer. If obligations are only imposed on bitstream over Míla copper local loops under these circumstances, the impact of those obligations will decline, while an increasingly larger part of Míla bitstream service goes over fibre-optic local loops. One may also expect that at many locations in the countryside, fibre-optic connections will completely take over from copper connections, as there are no cost grounds for operating two systems in parallel. In those networks, price obligations on bitstream over copper local loops will have no impact. The PTA refers to discussion on substitutability between copper and fibre-optic local loops here above.

It is also appropriate to point out in this connection with respect to fibre-optic local loops and bitstream services through them, that the PTA intends to apply an ERT test on the fibre-optic products of the Siminn Group, instead of imposing an obligation for cost analysed tariff on Míla fibre-optic on this market.

Míla referred to paragraph 1578 where it was then stated in the GR submission that when developing an access network based on PON technology, Míla had the option of locating the PON splitter either in a telephone exchange (central) or in a conduit access pit (near buildings). For example, the PON splitter was located in Míla telephone exchanges Rauðarársímstöð and Engihlíð. The splitter could also be installed at the outset and later whole spliced in the conduit access pit to form an uninterrupted optical fibre for a specific company. The topology could also differ depending on whether it was in the direction of residential areas or commercial areas. If a GPON splitter was located in a telephone exchange, there was no fundamental difference in these two products, i.e., fibre-optic local loop or optical line named Ljóslína. In the opinion of GR, it was perfectly clear to Míla that by selling PON corporate products, these two markets were overlapping. It had clearly come to light in communications between Míla and the PTA in the PTA Decision no. 24/2017 (review of Míla wholesale tariff for optical lines in street cabinets (M4) and optical lines in access network (M4)).

Míla pointed out that the development phase of Míla fibre-optic system was in progress. In a number of instances where development was not completed, splitters had been installed in a telephone exchange in order to provide service for a small proportion of customers on the corporate market, e.g., close to the telephone exchange. These were exceptional cases and Míla planned to move the splitters out into the network as development continued. Corporate connections on GPON were significantly more expensive connections than those to homes.

The position of the PTA

The PTA will refer to this Míla comment in the revised preliminary draft (Appendix A). The Míla comment in question is not on its own the reason for imposition of the obligations that the PTA plans to apply and the Míla comment therefore does not change the PTA conclusion.

11.2.6 Cases that the Competition Authority is processing vis-à-vis the Siminn Group

Nova referred to very detailed discussion in a recent the CA Decision no. 25/2020 on a Siminn breach of the Settlement with the CA.

The position of the PTA

The PTA refers to discussion on this issue in Section 10.2 here above.

11.2.7 Summary and conclusions on competition problems related to Market 3b

Nova agreed that Míla was in a dominant position and supported the PTA plans for price obligation on central access, both in Míla copper and fibre-optic networks.

The position of the PTA

Reference is made to the PTA answers in Section 10 here above. The PTA has reviewed its position with respect to an obligation for cost analysed prices for central access to Mila fibre-optic local loops. The PTA proposes instead an obligation on the Siminn Group to the effect that the Group withstands an ERT test in accordance with the recommendation for harmonised application of obligations for non-discrimination and for cost analysis. The PTA opened national consultation on this changed approach by the PTA and on that occasion, Nova had the opportunity to comment on the change. Further reference is made to Appendix C to this decision.

The PTA plans on the other hand to maintain obligations for cost analysed prices for Míla bitstream service over the company's copper local loops.

Míla referred to paragraph 1592 in the preliminary analysis, where the PTA decision was presented to the effect that in the light of the competition problems that had been described, it was necessary to impose price obligation on central access, both the Míla copper and local loop networks.

Míla rejected once again that there was need for cost analysed single price on the fibre-optic market in Iceland. Míla was a long way from having deployed fibre-optic to all homes in the country, and by imposing a price obligation, Míla deployment was being made impossible without significant state aid. Such deployment would therefore in all likelihood be made by others, who were free to collect a sufficiently high local loop price, or it would not be done without state aid. It was clear that should this happen, the end-user would not be able to choose a local loop company and such networks would probably be more expensive than networks built by Míla, as they did not have the same economy of scale. With this, the PTA was delaying fibre-optic rollout in smaller urban kernels in the country and at the same time making them pay a higher monthly price than otherwise. Míla considered it unlikely in reality, that investors could be found who are prepared to embark on the investments that fibre-optic rollout to these urban kernels demanded, in the light of the uncertainty that 5G rollout brought to this market.

Reference is made to the PTA answers in Section 10 here above. The PTA has reviewed its position with respect to an obligation for cost analysed prices for central access to fibre-optic local loops. The PTA instead imposes an obligation on the Siminn Group to the effect that the Group withstands an ERT test concerning the fibre-optic products of the Group in accordance with the EU Commission recommendation for harmonised application of obligations for non-discrimination and price control from 2013 to support competition and strengthen investment in NGA networks.

The PTA nevertheless points out that other parties, for example Tengir and GR, have invested outside the Capital City Area without having varying local loop price, by location.

With respect to choice of end users between local loop companies, the situation was such that if a company other than Mila deploys fibre-optic then consumers can choose between access from that company over fibre-optic and ADSL/VDSL from Mila, and can thus choose between two local loop companies. If, on the other hand, Mila deploys fibre-optic, consumers will not be faced with such a choice. The PTA can therefore not see how Mila comes to the conclusion that if other than Mila lays fibre-optic, it will impair the choice of end users.

11.3 Obligations in force

No comments were received on this Section.

11.4 Assessment of impact of imposed obligations on Market M5/2008

Míla referred to paragraph 1608 in the preliminary draft, where the PTA assessed the impact of obligations on market 5/2008.

Míla stated that the PTA referred here to the footnote about a GR request for local loop access to 3 addresses in Úlfarsárdalur. The PTA is addressing the wrong market here because the request belonged to Market 3a and not bitstream market (M3b). Míla referred to its prior comment on paragraph 1271.

The position of the PTA

The PTA will remove the footnote on Úlfarsárdalur, see reply to the similar comment in Section 10.4.

11.5 Obligations that vary by geographic area

No comments were received on this Section.

11.6 Imposition of obligations pursuant to the Electronic Communications Act

11.6.1 Obligation to provide access

Vodafone said that it had been very unclear whether Siminn had in reality A1 or A3 with Míla and how Vodafone could sell IPTV to Siminn customers over Internet in Míla systems. It was an absolute key issue that an obligation should be imposed on Míla (and as appropriate on Siminn) such that Vodafone could sell IPTV on Míla systems in as easy a manner as Siminn can do this through Mila's systems, both on VDSL and GPON to homes, e.g., such that Siminn customers in Internet can purchase TV service from Vodafone (IPTV service). Otherwise, the Míla/Siminn hindrances in this field lead to barriers to competition that could have serious consequences for the electronic communications market as a whole, and support even further the vertically integrated position of Míla/Siminn.

The position of the PTA

It was important that competitors of the Siminn Group, had access to the access products that enable them to compete with the Group on a level playing field. Míla is subject to access and non-discrimination obligations on the relevant market and those obligations are maintained pursuant to the preliminary draft that is open for consultation here.

The Mila offer of bitstream products is presented in the company's reference offer. The reference offer that is in force, was submitted to consultation with stakeholders at the appropriate time. Various changes and additions have been made since the last review, where each change was submitted for consultation. If there is a question of whether Mila has complied with obligations or with its own reference offer, this will be best solved in a formal manner by sending a submission to the PTA to this effect.

In the same manner, the Mila reference offer will be reviewed, and national consultation opened on the renewed offer subsequent to a decision on the relevant markets. In this manner the appropriate forum will be opened for presenting stakeholder views on specific access products, on new possibilities that need to be introduced or changes to existing products.

Now there are significant changes occurring to Míla, possibilities for bitstream transit with the company's taking over the Siminn IP-MPLS system, from and including 1 January 2021, and Míla has announced a wholesale offer of new products based on the system later in 2021, but it is not the right time now to discuss these possibilities further, until they are available.

Míla referred to paragraph 1660 in the preliminary draft, where it is stated that Míla had leased fibre-optic local loops from Tengir in North Iceland and connected its bitstream equipment on them, in addition to deploying a parallel fibre-optic network, step-by-step. As by far the largest retailer in the country, Siminn, did not provide service on bitstream systems of parties other than Míla on the residential market, and because there were more service providers at some locations that use the Míla bitstream system, the PTA considered it

important that Míla should not withdraw that equipment and that service while such a situation pertained. The PTA therefore imposed on Míla the obligation to not withdraw its bitstream equipment or service from the fibre-optic networks of other network operators than Míla, from whom Míla had leased dark fibre, while Siminn did not provide service over bitstream systems of such operators. Such an obligation was for the benefit of competition on the relevant market and related markets and conducive to maintaining or increasing options for service providers and consumers with respect to choice of underlying electronic communications network.

Míla furthermore, referred to paragraph 1661 in the preliminary draft, where it was stated that Míla had not provided its bitstream service on the Tengir parallel fibre-optic network at Húsavík. This meant that consumers in Húsavík that purchased service from Siminn did not have the option of connecting to the Tengir fibre-optic network in that town, while Siminn did not connect to the Tengir fibre-optic network. There was a danger that this development could continue at other locations where Tengir and Míla deployed parallel fibre-optic networks. The PTA imposed the obligation on Míla to connect its bitstream equipment with Tengir fibre-optic local loops, and with those of other network operators that might be in the same position as Tengir, given that the network operators in question paid the cost of such installation and a reasonable additional operating cost which might be created for Míla by this, while Siminn did not connect the fibre-optic system of the network operators in question in a specific area. The PTA could decide what reasonable start-up and operational cost should be in such instances, should it be disputed between the parties.

Míla considered that the PTA did not have legal authority to demand that Míla could not choose suppliers for its service, and there was no foreign precedent for such a decision. It would be a significant breach of the freedom of contract to impose an obligation on Míla about which suppliers the company did business with. Míla bitstream service had needed to pay ISK 212 or ISK 312 in addition, for access to Tengir fibre-optic local loops, such that up to this point in time it had been Míla that had had a need for these transactions and was willing to pay for them, even though Míla had Ljósnet service (VDSL) in the same area. This was an example of how copper was not a substitute product for fibre-optic, as maintained by the PTA. If it was correct that Tengir access to Míla bitstream service was vitally necessary for them, as one can understand this market analysis, Míla asked itself why it was Míla that paid Tengir additionally for access to Tengir local loops and not vice versa. With this decision, the PTA was in fact preventing Míla development in the same area as Tengir had its system and in fact was preventing competition in infrastructure in those areas.

The position of the PTA

The PTA rejects that the Administration did not have authority to impose an obligation on Míla to not withdraw its bitstream equipment or service from the fibre-optic networks of other network operators than Míla, from whom Míla has leased dark fibre, while Siminn does not provide service over bitstream systems of such operators. In this instance this is an attempt to limit the impact of vertical integration of the Siminn Group, which could damage competition and limit consumer options in choice of underlying electronic communications network. In those instances, Míla has installed its bitstream equipment on such fibre-optic networks and incurred costs in this connection. Míla would be released from such an obligation if the parent company, Siminn, would make an agreement on bitstream access with an appropriate party,

e.g., Tengir, but that company has for a long time requested such transactions with Siminn. The PTA points out that Siminn has already made an agreement for such access with GR, and the intention is that Siminn service will be offered on the GR network in the latter half of 2021. Siminn has also declared that the company, furthermore, plans to make an agreement with Tengir on such access. The obligation on Mila should thus be no longer in place.

Míla considered this to be a breach of the company's freedom of contract. The PTA points out that all kinds of obligations resting on the company impair Míla freedom of contract. In this respect, this obligation is not so different from other obligations that rest on the company. The PTA cannot see why this obligation should prevent Míla fibre-optic development in such areas. Míla has for example in recent years deployed fibre-optic in the operational territory of Tengir, despite having been purchasing fibre-optic local loops from that company. The PTA repeats that the obligation is lifted if Siminn makes an agreement on bitstream access to the Tengir system.

Míla also mentioned that the price Míla bitstream service had needed to pay, ISK 212 (urban area) and ISK 312 (rural area) in addition, for access to Tengir fibre-optic local loops, such that up to this point in time it had been Míla that had had a need for these transactions and was willing to pay for them, even though Míla had Ljósnet service in the same area. If it was correct that Tengir access to Míla bitstream service was vitally necessary for Tengir, Míla asked itself why it was then Míla that paid Tengir additionally for access to Tengir local loops and not vice versa.

The PTA notes that Míla recognises here that the company has been willing to pay the above specified extra charge to Tengir. The PTA has not been aware that the company considered it to be unreasonable in itself, or abnormally high. In addition to this, Míla has recently added this charge to its tariff and thus collects it from service providers.

To prevent Tengir, or other electronic communications in comparable position vis-à-vis Míla, from being able to increase such charges at will or require unreasonable conditions from Míla, which is obliged to provide its service over the Tengir network, the PTA plans to change the wording of the paragraph in question, 1660, such that Míla can submit to the PTA whether the Tengir charge, or that of other electronic communications companies in the same position, or other conditions are fair and normal. The PTA then decides this with a decision. If the PTA considers the price conditions abnormal, the Administration will lift the obligation from Míla, if the parties in question do not comply with the PTA decision.

Finally, the PTA cannot see how this should support the Mila assertion that there is no substitutability between copper and fibre-optic networks. The PTA has come to the conclusion that such substitutability still exists and that it will continue to do so throughout the lifetime of the analysis. Reference is made to Sections 3 and 4 here above, to the same sections in the revised draft market analysis (Appendix A) and Appendix C, in support of this.

Tengir stated in connection with the above specified paragraph 1661 in the preliminary draft, that Míla received revenue from lease of bitstream service to electronic communications companies for those local loops that were on the Tengir fibre-optic network, but that go to

Míla GPON equipment. Míla had made a cost analysis of the price for bitstream service, such that there should not be any additional costs, in excess of other Míla bitstream service. The Míla telephone exchange and the Tengir facilities at Húsavík were in addition to this, in adjacent spaces, and this was among other things, arranged in this manner to facilitate this element even more. Reasonable additional opex for operating bitstream equipment does therefore not apply in the opinion of Tengir.

With respect to paragraph 1162 in the preliminary draft, where is stated that an agreement on bitstream access should be completed within normal time limits and without unnecessary delays, Tengir asks what the PTA considered to be "normal" time limits. In the light of repeated delays in negotiations, Tengir requested that there was a defined timeframe in weeks/months from this time on.

The position of the PTA

As is stated in the above specified paragraph 1661 in the preliminary draft, the PTA imposes an obligation on Míla to connect its bitstream with Tengir fibre-optic local loops, and with those of other network operators that may be in the same position as Tengir, given that the network operators in question pay the cost of such development and a reasonable additional operating cost which may be created for Míla by this, while Siminn does not connect the fibre-optic system of the network operators in question in the relevant area. The PTA could then decide what a reasonable start-up and operational cost should be in such instances, should it be disputed between the parties.

Tengir points out that Míla receives income from bitstream service to electronic communications companies because of the local loops that were on the Tengir fibre-optic network, but less on Míla GPON equipment. There should be no additional cost in excess of other Míla bitstream service in the opinion of Tengir. Reasonable additional opex for operation of Míla bitstream equipment therefore did not apply. Tengir facilities and telephone exchange at Húsavík were, for example, in adjacent spaces.

The PTA does not agree with Tengir that there cannot be additional start-up and/or opex for Míla because of this obligation. This rule did not only apply to the circumstances at Húsavík but is rather a general rule. It is not therefore certain that circumstances are the same everywhere in this respect. The PTA reminds that a dispute between Míla and a relevant electronic communications company on price could come to the PTA for resolution.

With respect to the Tengir comment on paragraph 1162, the PTA considers it not appropriate to prescribe in a more definitive manner what is considered to be a reasonable timescale for negotiations for access to Mila bitstream system, e.g., counted in weeks or months. Various things can occur in such negotiations, but the main rule is that they shall be completed within a normal timeframe and without unnecessary delays.

11.6.2 Obligation for non-discrimination

Míla said, with respect to the Tengir complaint about fibre-optic rollout in Húsavík, that it referred to a Míla reply to the CA, dated 22 June 2020, see accompanying document 4, where the Tengir case was totally rejected as incorrect and unfounded.

With respect to planned obligations with respect to this issue, it was specifically rejected that the PTA had authority in law to impose such a Míla "duty of purchase" from competitors on the wholesale market, as there was no such authority to be found in electronic communications legislation, and nor could any grounds for this be found in ESA recommendations, see also article 16 of the Electronic Communications Act. Nor did Míla know of this precedent in the European electronic communications market, that a wholesaler on an electronic communications market, subject to special obligations in its operations, including vis-à-vis retailers, see article 17 and 27 of the Electronic Communications Act, had such obligations vis-à-vis other wholesalers, as this would undermine all decisions and measures for investment, their basis, etc. Nor did Míla know of any example that such could be found in the procedures of national or European competition authorities.

It was furthermore unparalleled that a unilateral assertion by competitors, that had not been verified, and that Mila contested, was used as grounds to justify obligations that had a major impact on Mila operations, on the basis for investment, for future development, etc., like the obligation on "duty to purchase" for example did.

The position of the PTA

The PTA refers to its answer in Section 11.6.1 here above on a similar issue. The PTA considers it has authority to impose such access and non-discrimination obligations on Míla, but points out that the Míla parent company, Siminn, could in a simple manner free Míla from this obligation by making an agreement on access to the Tengir bitstream system, as Siminn said it intends to do. The PTA has not particularly investigated whether other NRAs have imposed comparable or similar obligations but does not exclude that. The PTA is here first and foremost, endeavouring to resolve a competition problem that has been identified in this country and is related to the vertical integration of the Siminn Group.

The PTA rejects that it blindly takes account of complaints of competitors of the Siminn Group, and that it does not assess whether the complaints constitute real competition problems. In this instance, the PTA considered that the complaint or notification in question from Tengir constituted a real competition problem and for this reason the PTA considers it necessary to apply the obligation in question, which is discussed in paragraphs 1660 and 1661 in the preliminary draft, on Míla. Paragraph 1660 in the initial draft has been slightly amended to meet Mila's comments.

Míla referred to paragraph 1678 in the preliminary draft where it is stated that Míla provided first and foremost bitstream access through copper and fibre-optic local loops of its own company, but however provided such service through the fibre-optic networks of other network operators such as e.g., Tengir in North Iceland and smaller local networks. The Míla bitstream unit was not authorised to discriminate in any manner by underlying network with

respect to price or other possible charges, processing of work requests with respect to connection or configuration of equipment. In this way, Míla the bitstream unit should thus process requests about connections and configuration of connections through fibre-optic networks of unrelated parties in the same manner as with its own local loops. Costs, delivery times, complexity and inconvenience vis-à-vis service providers and/or end users should be the same. Míla was unauthorised to assume that Míla local loops were the default choice for an underlying local loop when a request for connection came from a sales representative of another network operator or service provider or if an end-user requested that a local loop from an unrelated party be the underlying network.

Míla objected to this obligation as totally unfounded, unlawful and completely unreasonable. Míla bitstream service considered there to be no arguments for the company not having a choice of the underlying service the company would choose, for example depending on who made the best offer. Today the underlying cost for Míla bitstream service for access to local loops was varied, and it was absolutely irregular in the opinion of Míla that the company could not choose a service provider, e.g., by price. Míla also considered it not normal that the company itself needed to absorb the cost that some service providers demanded for Míla to have access to their networks, i.e., that Míla needed to subsidise such use with revenue from other users. In Míla's opinion, this was not according to competition legislation.

The position of the PTA

The PTA rejects that the non-discrimination obligation is unfounded, unlawful or unreasonable. The PTA has previously made a decision that constitutes Míla local loop and bitstream units being separated and that the units be obliged to respect non-discrimination internally and vis-à-vis external parties, see among other things PTA Decision no. 34/2014 on Snerpa access request to Míla street cabinets in Holtahverfi in Ísafjörður. The PTA cannot see how such a non-discrimination obligation as this can be unlawful and unreasonable, and in addition to this the PTA considers that it has argued its necessity in an adequate manner.

In Section 11.6.1 here above, the PTA has argued the necessity for limiting Míla right to contract with respect to selection of the underlying service the company would choose, see paragraph 1660 1661. The PTA has among other things, decided to elaborate paragraph 1660 in order to remove issues in it, in favour of Míla. The PTA once again reiterates that Siminn can easily release Míla from these obligations.

Tengir referred to paragraph 1679 in the preliminary draft, where it is stated that information on central access and service related to the access shall be accessible to other electronic communications companies in an equal manner as to related parties. The PTA considered it particularly important that Míla did not have the opportunity to discriminate in an irregular manner between related and unrelated parties with respect to innovations on the market (first mover advantage). As related retail markets were in continuous development, unrelated parties had to be certain that the appropriate wholesale products were available with adequate notice in order that they could offer new, improved and less expensive retail service (for example more capacity in Internet access) at the same time as parties related to Míla. The PTA therefore plans to maintain the obligation on Míla, that unrelated parties be informed of distribution, or other network development and Míla central access, service (and related

service and other significant innovations) with the same notice as parties related to Míla. This notice should under no circumstances be shorter than three months. Information should among other things contain planned prices, conditions, technical specifications, scheduled distribution plans, updated position on distribution and planned connection points. Such information was particularly important with respect to migration from ADSL to VDSL and with respect to distribution of bitstream through fibre-optic local loops. Related parties might thus not receive the information in question before unrelated parties. Míla should give related and unrelated parties the opportunity to influence development of new wholesale products and planned interfaces. Míla may not refuse to develop new service at the request of an unrelated party simply because a related party had not requested such service. Such a request by an unrelated party should however be reasonable and normal.

Tengir considered that, according to the paragraph in question, Míla needed to again provide electronic communications companies with access to which services were on offer at the addresses, such that Tengir could examine whether, e.g., Tengir fibre-optic was registered in the Míla system, and such registration needed to be in place so that Siminn and other service providers that used GPON could have requests processed through a fibre-optic connection to Tengir. Míla had closed this possibility two years previously, where Tengir had not been able to receive information on where Míla had fibre-optic. The web page www.mila.is had also been changed, such that customers did not see whether they were purchasing Tengir fibre-optic or Míla fibre-optic, as they could before. They could therefore in no way see whether it was fibre-optic owned by Míla or of others to which Míla had access.

The position of the PTA

The PTA considers that, according to the paragraph in question, Míla needed to provide electronic communications companies again access to which services are on offer at addresses, such that Tengir could examine whether, e.g., Tengir fibre-optic is registered in the Míla system, and such registration needs to be in place for Siminn and other service providers that use Míla GPON can have those requests processed over a Tengir fibre-optic connection. Míla had closed this possibility two years previously according to Míla, because Tengir was not allowed to receive information on where Míla had fibre-optic.

In the opinion of the PTA, Míla must fulfil the non-discrimination obligation in question, including duty to inform, vis-à-vis those requesting services that request access to the Míla bitstream system. Míla furthermore had to provide service providers with access to information on where fibre-optic connections are being offered, whether they are owned by Míla or by other electronic communications companies from whom Míla leases fibre-optic local loops. It is entirely up to Míla, whether this is done on the company's website or in other systems to which service providers have access. Then Míla is obliged to make sure that information on distribution is available to these parties with the above specified 3 months' notice. This obligation does however not apply to Tengir, or to other electronic infrastructure companies from whom Míla leases fibre-optic local loops.

According to Tengir, the Míla web page has also been changed, such that customers did not see whether they were purchasing Tengir fibre-optic or Míla fibre-optic, as it used to be.

The obligation in question is as stated before, intended for service providers that lease bitstream access from Míla. It prescribes the duty of information vis-à-vis end users, about whether they are connected through Míla fibre-optic, or that of other electronic communications companies from which Míla leases local loops. The PTA points out that Míla shall accede to requests from service providers and as appropriate from end users, that require bitstream access over fibre-optic local loop of an electronic communications infrastructure company from which Míla leases fibre-optic local loops. The PTA furthermore reminds that separation and non-discrimination shall apply between Míla local loop and bitstream units, which should prevent a breach of non-discrimination in this respect.

11.6.3 Obligation for transparency

Míla referred to paragraph 1700 in the preliminary draft where it was stated that in the revised reference offer, Míla should, among other things publish work procedures that describe how the company handled requests for access to new service on existing networks. New service refers among other things to increased speed and shorter maintenance time than has been the practice to date. In the work procedures it is obligatory among other things, to specify: how such requests should be made and in what form, information that was necessary for Míla to assess whether it was feasible to provide the new access and the time window for processing such a request. The main rule was that Míla was obliged to process such requests as rapidly as possible. Should Míla have rejected the new access then the company was obliged to justify this in writing. Such a rejection could be referred to the PTA.

It was stated by Míla that the company wondered whether the PTA was saying that Míla could make new products, and price and conditions, without the PTA demanding that Míla submitted such a product offer to the Administration for endorsement. Míla requested that the PTA explain what the Administration meant. Míla pointed out that here a claim was being made that Míla considered to have no precedent, as obligations were normally about providing all customers with the same service.

The position of the PTA

The paragraph discusses instances where purchasers of access have a need for an access form which is in some way different from the Míla offer. If the request can be implemented and is not too burdensome for Míla, then it could be that it would be considered fair and normal. This is a more detailed explanation of what was stated in the last point under item 3 in the list of contents of the reference offer pursuant to paragraph 1702 of the initial draft. It Míla accepted a request for changed access service, it is obliged to notify this with normal notice to the PTA and to offer other customers the same kind of service, in accordance with the obligation for non-discrimination.

Míla referred to paragraph 1702 in the preliminary draft, where it was listed what should appear in the Míla reference offer at a minimum, for the relevant Market 3b.

Míla did not understand what this article meant and asked whether the PTA could give an example of what was meant in this case.

The listing of minimum contents of the reference offer is taken from BEREC recommendations from 2019, BEREC Guidelines on the minimum criteria for a reference offer, BoR (19) 238. The structure of the description of contents is slightly changed from that in market analysis 2014, but the content is actually very similar. As Míla points out, provisions needed to be added about access to ducts and conduits, but in other respects, there is little that is not either in the listing of minimum content in market analysis 2014 or already in the Míla reference offer, such as SLA and SLG.

11.6.4 Obligation for separation of accountancy

Míla referred to paragraph 1712 in the preliminary draft, where it is specified what information and data on operations and balance sheet that the company's bitstream service should deliver to the Administration and that they should harmonise with the base of the Míla cost analysis.

Míla pointed out that an instance could always occur in cost analysis, where one needed to correct opex. Delivery to the PTA was based on direct information from bookkeeping, and it could always occur in subsequent scrutiny that cost figures needed to be corrected, such that there needed to be latitude for this and then in a traceable manner.

The position of the PTA

When cost analyses are based on historical costs, it is necessary for the PTA to be able to verify that the numbers that are used in such analyses are correct, where data from bookkeeping of the relevant company is applied where costs are allocated to relevant services.

In practice, the PTA has taken into account reasonable changes to Míla calculations in accordance with available data, when it has come to light that information from the company's cost bookkeeping needs to be corrected.

11.6.5 Obligation for price control

Tengir said that it supported the PTA plans to add a price obligation on Míla fibre-optic on the relevant wholesale market. Tengir placed great emphasis on the importance of this, as indications had emerged that the Siminn Group kept prices down and have even practised subsidies/under-pricing on the relevant markets and thus significantly impaired the competitive grounds of independent network operators. In addition to this, Tengir emphasised the importance of the obligations where the PTA had reached the conclusion that they were necessary to ensure that the company in a dominant market position did not have the opportunity and incentive to discriminate against competitors in pricing.

The position of the PTA

Reference is made to the PTA answers in Section 10 here above. The PTA has reviewed its position with respect to an obligation for cost analysed prices for central access to Mila fibre-optic local loops. The PTA proposes instead an obligation on the Siminn Group to the effect

that the Group withstands an ERT test in accordance with the recommendation for harmonised application of obligations for non-discrimination and for cost analysis. The PTA opened national consultation on this new PTA approach and Tengir had the opportunity there to voice an opinion on the change, see Appendix C to this decision, but decided not to do so.

The PTA plans on the other hand to maintain obligations for cost analysed prices for Míla bitstream service over the company's copper local loops.

Nova said it agreed that it was time the obligations also covered Míla fibre-optic networks, as development on those networks had been very substantial and had strengthened Míla's position even further in being dominant on the relevant market.

The position of the PTA

Reference is made to the PTA answers in Section 10 here above. The PTA has reviewed its position with respect to an obligation for cost analysed prices for central access to Míla fibre-optic local loops. The PTA proposes instead an obligation on the Siminn Group to the effect that the Group withstands an ERT test in accordance with the recommendation for harmonised application of obligations for non-discrimination and for cost analysis.

Míla referred to paragraph 1741 in the preliminary draft, where it was stated that the PTA planned to impose an obligation for price control on the company's bitstream access which was provided over fibre-optic local loops. There it was stated that Míla was to submit its wholesale tariff for access to bitstream at various locations on the network where variations in bandwidth and quality were also taken into consideration.

In the opinion of Míla, it seemed that the PTA here intended to force the market from the path on which it was now, i.e., that end-users could get maximum connections at any given time. Míla asked whether this was what parties to the market wanted.

The position of the PTA

Reference is made to the PTA answers in Section 10 above. The PTA has reviewed its position with respect to an obligation for cost analysed prices for central access to Míla fibre-optic local loops. The PTA proposes instead an obligation on the Siminn Group to the effect that the Group withstands an ERT test in accordance with the recommendation for harmonised application of obligations for non-discrimination and for cost analysis.

Míla referred to paragraph 1743 in the preliminary draft, where it was stated that the PTA considered it necessary to impose a price obligation on Míla bitstream service that was provided over fibre-optic, in the light of the Míla position on this market and the strength of the Siminn Group as a whole in electronic communications in the country. In addition to this, Míla fibre-optic rollout was well advanced, and the PTA considered there to be no longer reason to exclude fibre-optic local loops from price control obligations.

In the opinion of Míla, the PTA had not correctly assessed the situation. With this analysis, the Míla development in uneconomic areas was being made impossible which would lead to a significant slowing down in the company's development, and even to it stopping. Míla was

being penalised here for serving sparsely populated areas at the same time as the position in the Icelandic electronic communications market was unique at world level, i.e., two local loop networks already reached about 80% of homes and companies and were progressing towards 90% in 2021. The difference was however that Míla competed with parties with a copper system on about 50% of its network, while competitors-controlled fibre-optic networks to about 80-90% of the market. Míla considered it clear that the PTA had to take into account this difference, as otherwise Míla was heading towards having a very low market share in competitive areas and the significant Míla investments in those areas would remain unused for the future.

If one considered specifically bitstream service, and the situation was that in areas suffering from market failure, where the state had supported the rollout of fibre-optic, Míla provided service on the networks. Because of social responsibility, Míla had built up bitstream service in areas where there was no hope of profit for the company. With this PTA decision, it was clear that Míla would not be able to maintain this development and would in fact withdraw service from these areas.

The position of the PTA

Reference is made to the PTA answers in Section 10 here above. The PTA has reviewed its position with respect to an obligation for cost analysed prices for central access to Mila fibre-optic local loops. The PTA proposes instead an obligation on the Siminn Group to the effect that the Group withstands an ERT test in accordance with the recommendation for harmonised application of obligations for non-discrimination and for cost analysis.

With respect to the position SMP position, the PTA refers to the discussion in Section 9 in the revised draft market analysis (Appendix A) og to the same section here above.

Míla referred to paragraph 1752 in the preliminary draft with respect to number of units in calculations of price and pointed out that there needed to be some latitude in place, particularly if there was a steady decrease or increase in the units. The cost was nevertheless there and did not change proportionately with changes in quantity. It also needed to be possible to take into account that xDSL was on its way out where there was GPON, and where possibly temporarily, dual systems were being operated.

The position of the PTA

The PTA will examine each instance individually with respect to this but plans to apply the main rule of using the number that was operational during the year being analysed. The PTA plans to prescribe that it will be authorised to take into account development of unit numbers in calculation of price, but subject to PTA endorsement in each instance.

Míla referred to paragraph 1754 in the preliminary draft, where there was discussion on frequency of cost analysis and rejected that the Administration was not capable of reviewing cost analysis annually, as would be normal. There were currently huge changes on the market, and this could have a significant impact on Míla revenue. Waiting for many years for correction was not acceptable at the same time as the PTA imposed such burdens on Míla

then it was clear that the company would lose many more connections than the current 3-4% per annum.

The position of the PTA

In the existing market analysis, an annual review of tariff was allowed for. It had come to light that the review of all cost analyses each year, in addition to examining individual analyses from Míla for individual cases, has not worked. ESA has also commented on that arrangement, as it is considered not to create adequate foreseeability for parties to the market if prices are continuously being changed. The PTA actually, however, plans not to decrease reviews from what has been practised, but rather to adjust the plan to reality.

Míla referred to paragraph 1755 in the preliminary draft, and there referred to paragraph 1456, where Míla had requested explanations as to how the 2% efficiency requirement had been decided.

The position of the PTA

The same proportion is applied in the efficiency requirement as is used when tilt is decided when calculating annuity. With the decision on tilt, the development of the price of equipment has been taken into account.

11.6.6 Obligation for cost accounting

No comments were received on this section.