

Appendix III

Comments from national consultation

Case number: 2019020057



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1 Introduction

The PTA preliminary draft of the wholesale tariff for trunk section of leased lines was submitted for national consultation which lasted from 29 October to 13 November 2020. Comments were received from Nova hf. (Nova) og Gagnaveita Reykjavíkur (GR). The PTA gave Mila the option of answering the comments that were received and then submitted Mila's answers to Nova and GR.

In the Mila submission, it was stated that subsequent to comments from GR and Nova, Mila had reviewed the tariff for 100 Gb/s with a view to whether the company could reduce the price for this product. Mila considers it possible to change the distance categories for 100 Gb/s such that category 3 will be 100-250 km and in category 4 will be connections in excess of 250 km. In this manner, the route between Reykjavík and Akureyri will be significantly reduced. Mila will continue to examine the tariff structure for 100 Gb/s, and offer a lower price (with the agreement of the PTA), should demand be such that it creates latitude for reduction. As has been stated, Mila must assess the impact of very significant changes in service offer or tariff on current company revenue.

2 General comments

Nova considered that $[...]^1$.

It was however positive to now see a possibility in 100 Gb/s connections that could be used with interconnection of national regions, and that additionally could increase speed among other things, of development of 5G mobile networks, and which also increased other service opportunities in the countryside.

For such development to be economic, pricing needed to be realistic. It was therefore a great disappointment that the Mila tariff should not be in step with needs of parties to the market and thus hinder normal development and progress.

A price that was far too high meant that entry into a new market area will be extremely risky, which severely inhibits growth. There needed to be a significant guarantee of substantial and growing business in areas where basic infrastructure is so expensive.

The high price of basic infrastructure thus complicated competition and the possibilities to provide good and strong service across the country. [...] Such development supports innovation and creates opportunities to utilise the technology to increase prosperity and well-being in the community. It was important for very significant interests in developing electronic communication systems in Iceland, for consumer interests and for those of the community as a whole that efficient trunk line communications are on offer.

¹ The [...] indicates that the text includes confidential information.



Nova considers that the tone in Mila pricing is obsolete and does not sufficiently support the building and development of electronic communications in the country. A high price creates very risky circumstances (access barriers) and inhibits growth into new market areas, which will make it difficult to build up competition and good service across the whole country.

Mila reply

Mila pointed out that the company had purposefully worked in the last years towards building up its electronic communications network in accordance with customer needs, and for that purpose had developed a tariff such that connections became relatively cheaper as their bandwidth increased. Mila had also worked towards increasing the offer of data transfer speed, step-by-step and had reduced the price of broadband connections so that electronic communications companies could offer better service and more data transfer and a similar or even lower price.

Comparison of the price of Mila high speed connections:

	100 km			200 km				
	2004	2011	planned price	Change	2004	2011	Planned price	Change
622 Mb/s	749,285		396,285	-47%	1,195,985		702,008	-41%
1 Gb/s LL		513,253	463,695	-10%		921,848	821,153	-11%
1 Gb/s Ethernet			295,916	-42%			296,916	-68%
10 Gb/s LL		1,128,985				2,063,670		
10 Gb/s Ethernet			672,975	-40%			672,974	-67%
100 Gb/s			1,402,038				1,745,548	

The greatest bit speed that Mila offered in 2004 was a 622 Mb/s leased line. The lease price for 100 km had dropped by about 47% during this period and for 200 km the lease had dropped by 41%. The normal discount after 2011 is 15%.

A few years later, leased lines with the most bandwidth had progressed to 1 or 10 Gb/s. From 2011, the lease price of 100 km leased line dropped by 10% and the price for 200 km dropped by about 11%. In 2014, Mila had started to offer Ethernet service. This product was intended for high speed connections on routes where there was a significant need for bandwidth. If the price for Ethernet services compared to a leased line from 2011, the reduction is 42% for 100 km connection and 68% for a 200 km connection. The calculation assumes that 2 ports are used.

The same comparison for 10 Gb/s shows 40% reduction for 100 km connection and 67% reduction for 200 km.

The planned price for 100 km connection with 100 Gb/s data transfer speed is ISK 1,402,038, and if it is for 200 km, then it is ISK 1,745,548. If this is compared to 10 Gb/s connection in 2011 the difference is only 24% for 100 km connection, i.e. 10 times more speed for a 24% higher price. In the case of 200 km, the planned price for 100 Gb/s is just over 15% lower than 10 Gb/s cost in 2011. By comparison, the consumer price index has increased by just under 30% during the same period.



As one can see from the examples above, Mila has increased bandwidth in accordance with market needs and at the same time, reduced the price, as Mila revenue from the Trunk line network has changed little. It is also appropriate to point out that Mila revenue from the trunk line is trending towards being lower than in 2011, while data volume has increased enormously during this period. From the above one can see that effective economies have taken place in recent years, contrary to what Nova asserts.

Mila pointed out that the environment of Mila trunk line and of pricing is subject to surveillance by the PTA and the lease price is based on cost analysed average price. In this way, investments, development and opex are allocated to products in accordance with needs and the regulated structure, and when making the cost model, Mila has endeavoured to have the price for connections with greater bandwidth proportionately low in order to meet the continuously increasing bandwidth needs of service providers. When making this model, one also had to keep in mind that when the price is low on connections with more bandwidth, then customers cancel their connections with less bandwidth and lease fewer connections with more bandwidth instead. It is necessary to take this into account in the cost model, so that the company does not find itself in a situation where revenue collapses which could lead to an price increase in the next analysis. It is however appropriate to note as an example, that when Mila began to offer Ethernet service, the conscious decision had been made to absorb a temporary loss of revenue in order to facilitate the migration from traditional leased lines to Ethernet service. Mila could not have done this without special authority from the PTA.

Mila considers that the development in product offer and price change proposed here, has in no way the impact that Nova describes.

Mila furthermore wishes to note that the company considers the PTA and decision procedure on tariffs to be far too long. Technical changes and a significant increase in need for bandwidth does not in the opinion of Mila, return sufficiently quickly a more economic tariff. In the same way, overestimation of expected revenue, for example if one has allowed for more lease of high speed connections than turns out to be the reality, or if more low speed connections are cancelled than had been allowed for, can have grave consequences for Mila operations as the correction of prices takes too long. This means that Mila needs to tread more carefully than if it could regularly iterate the tariffs.

The position of the PTA

As is stated in the PTA preliminary draft, cost analyses on this market are based on PTA decision number 21/2015 dated 12 August 2015, on the designation of a company with significant market power and on the imposition of obligations on the wholesale market for trunk segments of leased lines, where a price control obligation was imposed on Mila. It is stated in that decision that the Mila tariff shall be based on historical cost base. There it is also stated that in assessment of line equivalent coefficients one should normally take into account costs in proportional context to the capacity and length of leased lines. In the PTA decision number 23/2015, dated 12 August 2015, on Mila tariff for Ethernet service on the wholesale market for



trunk line segments of leased lines, the fundamentals of structure of the Ethernet tariff were decided. It is clear that Mila had the right to recover opex and investments for providing the service in question in an economic manner, with the addition of reasonable return on investment. If the Mila cost analysis for trunk segments of leased lines returns a conclusion that the PTA considers unacceptable when taking into account development of price levels, the PTA can require a review of that conclusion. The PTA did not considered there to be reason to review the Mila conclusion in this respect, in the Administrations review of the Mila cost analysis, and the PTA has therefore endorsed the cost base on which the increase in Mila tariff is based.

Coefficients are used to calculate equivalents of service elements, and in this manner, an assessment is made of the value of varying service elements. In Mila's tariff for MPLS-TP service, this is done on the basis of the length of connections and bandwidth. The cost is then divided between connections/service elements accordingly. It is therefore not possible to reduce the price of specific connections without this having an impact on the price of other connections.

With this review of Mila tariff, the PTA has agreed not to change the structure of the tariff, but rather to allow the structure to remain unchanged. On the other hand, the PTA authorised Mila to add to the service offer, connections with more data transfer speed that are not fully in harmony with the structure that was endorsed. The reason for the PTA agreement was that the Mila proposal constituted lower coefficients than had been used and thus a smaller increase between data transfer speeds than if the same coefficients were used.

The PTA has commenced preparation for market analysis on the trunk line market and Nova comments on the situation on this market are a contribution to this work that the PTA will take into account. The PTA expects that this analysis will be completed by end of year 2021 or early in 2022.

With respect to the Mila comment that the process of reviewing tariffs is long, then the PTA can agree that it can transpire in some instances, that it suffers excessive delays. It is on the other hand, not desirable that tariffs should be amended too frequently, because that impinges on predictability on the market.

3 Comments with respect to tariff structure

Nova considers that a price model based on pay as you grow philosophy, is very important and even necessary at times, when there is significant development in changes in technology and a great need for powerful trunk routes.

Nova considers that the prices presented here are not of that nature. Nova considers that the service in question will not be used as it should be, in the interests of competition, and that there is a risk that the infrastructure constructed will be poorly or not used, instead of there being progression in electronic communications networks. [...]



Mila replies

Mila considered that Nova's assertions lack arguments and indicated that the Nova opinion that the price model should be based on pay as you grow, is currently actually built into the tariff such that the price of connections increases incrementally as the data transfer speed increases.

The position of the PTA

As is stated in the Mila answer, the tariff is structured such that the price increases incrementally as the data transfer speed of connections increases, and thus concessions have to some degree been made to that consideration. It is on the other hand, clear that if an electronic communications company plans to serve less populated locations in the countryside, the price for a trunk line connection can be so high that there is no commercial justification for smaller electronic communications companies to offer such service for so very few customers. With respect to the Nova comment on the [...] The PTA will examine this Nova comment in the market analysis of the trunk line market, and the PTA expects to complete work on the analysis this year or in the first part of next year.

GR considered that Mila pricing was generally structured such that it created an obstacle for smaller parties and for development by other parties around the country in order to create competition with Siminn. This is well manifested in the Siminn market position in the countryside, as is the poor fibre-optic development in areas where there are no strong local electronic communications companies (as for example in parts of the West Fjords and in Eyjafjörður).

Mila reply

Mila pointed out that, as is known, Vodafone has for 10 years leased a thread from the Icelandic state in the Fibre Optic Ring at a price that is well under market price in the opinion of Mila. One of the purposes of the call for tenders, and thus the leasing to Vodafone, had been to initiate competition with Mila in trunk line networks. There are also numerous parties with fibre-optic across the country. GR owns fibre-optic from Bifröst to the Westman Islands and at Suðurnes; Orkufjarskipti has fibre-optic at many locations to which electronic communications companies have purchased access; Tengir owns fibre-optic in large areas of North East Iceland, and it is very common for there to be local countryside networks with fibre-optic. In addition to this, Simin purchases trunk line service from Mila at the same price as all others. There are therefore many options, and good conditions for competition have been in place for a long time. The small size of the market, profitability and distance from the Capital City Area have an impact on the willingness of new parties who operate on commercial terms, to invest and develop in the countryside. In such regions, profitability is limited at many locations, or there are other more attractive options Development of fibre-optic connections to homes is not dependent on the Mila trunk line network or its pricing, as they belong to another market. Investments on each individual market need to be stand-alone and independent of each other. Tengir and Snerpa



have for example developed their connections to homes, independent of the Mila trunk line tariff and are now strong on the access market for fibre-optic local loops in their respective operational territory. Large electronic communications companies all have their own IP transit layer which reaches most of the country and they manage all transit of electronic communications around the country. Up to this point in time, Mila does not own such an IP transit layer. Any party that considers there to be commercial terms for such development, can do this by leasing various fibre-optic options on offer, by leasing the Mila trunk line network or from Vodafone. The grounds for the development are transactions with end users and for this reason, Siminn, Vodafone and Nova have built an IP transit layer with national coverage as the underlying layer for electronic communications service for their users. Nova (previously Símafélagið) has built up its service mostly during the last 5 years "despite" the Mila tariff. There is considerable investment in building up such service and smaller players can purchase the service from larger players, which is what they do.

The position of the PTA

With respect to the Mila discussion on the NATO fibre-optic, the PTA points out that Mila has 5 threads in that fibre-optic and Vodafone leases one thread and the agreement on that single thread is expiring. There is therefore a significant difference in the position of Mila and Vodafone with regards to providing service on the NATO ring, and in the resources that the companies control. In addition to this, the technical arrangement required when only having control of one thread, has made it more difficult for Vodafone to develop wholesale service, because wavelength service is subject to issues and is expensive for a party that does not control a fibre-optic pair. With respect to the Mila assertion that the lease price for the thread leased by Vodafone it is far below market price, it is appropriate to point out that ESA came to the conclusion², after a formal investigation that the agreed price of the lease holder was in accordance with market value.

Mila has had a dominant position on the trunk line market with respect to distribution of the trunk line network at a national level and if an electronic communications company wishes to reach all homes in the country, then it cannot avoid using the Mila trunk line network in one way or another. The situation is therefore not such that those who think the Mila price is too high can always turn to another party for access to a trunk line network in the countryside.

The PTA does not agree with Mila that development of fibre-optic connections to homes is not dependent on the Mila trunk line network or its pricing. Though trunk lines belong to another market than fibre-optic connections to the home, access to the trunk line network is necessary for electronic communications companies to be able to provide service over local loops. In the case of locations with small populations, far from the operational areas of most electric communications companies, it is likely that few electronic communication companies are

² See PTA Decision number 061/16 from 16 March 2016.



prepared to provide service over such local loops as a large part of the cost of providing the service is the trunk line cost which is shared by few customers.

On the other hand, it is the nature of the trunk line that its cost is not dependent on the number of customers that connect to each connection that an electronic communications company leases, and for this reason, this has not been taken into account in the structure of the tariff. As stated here above, it is not possible to reduce the price of longer connections without increasing the prices other connections. In this instance, the PTA decided to endorse the Mila request to not disturb the structure of the trunk line tariff. In the current market analysis of the trunk line market, the PTA will among other things examine whether the structure of the tariff needs to be changed in the event that a price obligation is imposed on a party with significant market power.

Nova proposed that Mila be only authorised to collect once for setup-up charge "at the same location". Nowadays, for example, many companies in the Capital City Area and in the countryside are in a difficult situation financially and many would like to reduce their costs for networks. It is almost impossible to "pause" or to cancel service without running the risk of getting another invoice for a high setup charge.

Mila replies

It was stated by Mila that the setup-up charge was based on the cost of setting up the connection. Mila had therefore not collected a setup charge when a company increased data transfer rate.

Leased line connections are generally leased for the long-term and Mila had seen no reason to offer to put a leased line connection in "pause", as electronic communications companies made decisions on offering service in a specific location for the long term. Short-term external events or operational problems of customers of electronic communications companies did not have the effect that the companies stopped offering service for a short time and then started to provide service again at a later point in time. In this connection it is appropriate to note that electronic communications companies normally lease broadband connections and offer data transfer service to individuals/companies over these connections. Though companies/individuals encounter temporary problems, the electronic communications company is not going to cancel its trunk line connections, as it is still providing other parties with service over the same connections. This Nova comment may be better home on the access network market, where each local loop is for private use for end users.

Mila is designated as having SMP on the trunk line market and the lease price should be based on costs. The PTA issues guidelines on the cost base and Mila needs to provide strong arguments for changes, if the company considers it necessary to make changes to the cost model



or to the conditions that are imposed. By the nature of things, such models do not allow for special conditions that can arise in the community.

Electronic communications companies can however, always cancel connections at short notice without cost. Setup charge on connections has in the opinion of Mila no impact on whether these companies will survive through the huge problems they face, that result from limited or even no operations, as start-up charges are only a small part of the total cost of electronic communications. Mila would however like to note that when the Covid 19 pandemic came in March, Mila had decided to offer those electronic communications companies that so requested, additional bandwidth on the trunk line network without payment, as it was clear that homeworking would become substantial in the community, and a lot of work was put into improving security of connections.

Mila does not exclude the possibility of changing the terms such as customers can stop using connections, and thus paying lease, for a specific period of time. Mila considers however, that the need for this change is greater in access networks and will examine this in more detail.

The position of the PTA

The PTA refers to Mila's answer and considers there to be no need to change trunk line setup charges for the time being.

Nova refers to paragraph 63 in the preliminary draft where it states: "In calculations, it is allowed for...". Nova points out that it is difficult to understand the logic behind this and what is being referred to in the cost analysis.

Mila reply

Here it means that the tariff for MDH (Metropolitan Data Highway) increases the same as other leased lines.

The position of the PTA

The PTA considers there to be no reason to add to the Mila reply.

Nova referred to page 20 in section 5, where the exponential coefficient is explained. Nova considers that the reduction applied is far too low. There are also no arguments at all for why the jumps in price are so decisively high as is the case, particularly when one considers that the basic investment that is applied, i.e. fibre-optic, needs no change to achieve the excess transit capacity in question. This is very much out of step with the cost oriented thinking that should lie behind these prices.

The increase in prices by speed is astonishing. What is it for example that results in connections in the 100-200 km category costing ISK 415,764 for a 3 Gb/s connection, while a 100 Gb/s



connection costs ISK 1,374,038, i.e. almost fourfold difference? One can expect that the largest part of the investment for a connection is 100-200 km fibre-optic cable which costs the same regardless of speed.

In general, the additional cost of providing 100G service on a specific line in excess of 10G service lies solely in investment in equipment. The equipment investment, when it has been made, can be used equally to provide 10G, 25G, 50G and 100G connections and the cost base for bandwidth units should be similar for each bandwidth category. One may then strongly argue that prices for these bandwidth categories should not increase almost linearly as is proposed, but for each bandwidth unit the larger the connections are that are taken. Pricing should encourage more use, not discourage.

Mila reply

Mila rejects that the jump between data transfer rates is high. The difference between 3 Gb/s and 100 Gb/s is not just less than fourfold, but rather just over threefold. In reality, electronic communications companies are paying 3.3 times more for 33 times more bandwidth. This means that in the case of 3 Gb/s, the electronic communications company pays ISK 138,588 for each Gb, whereas in the case of 100 Gb/s, the company pays ISK 13,740, which is about 10 times less.

Though the additional cost for increased bandwidth is not great, one has to divide the costs on the connections that are being leased. If connections were to cost the same, without reference to data transfer rates, the lease price for those companies that require little bandwidth would be far too high. Mila pointed out that the customers that purchased most bandwidth would then pay less, compared to smaller parties, which should mean that smaller parties would not have the financial capacity to purchase leased line service from Mila.

When making a cost model, where electronic communications companies shared bandwidth, one must take into account the fact that the party leasing more bandwidth is using more of the fibre-optic and equipment than the party that purchases little bandwidth. It is however clear that nor would it be fair to have the difference linear, because, as Nova points out, the additional cost is not linear when bandwidth increases. Mila had therefore made a compromise in its calculations, i.e. those that purchase much bandwidth enjoy economy of scale but nevertheless have to pay more than those who lease little bandwidth.

Here, the cost is being divided in accordance with a methodology recommended by the PTA in market analysis. In this way, price changes need to reflect the use of resources and changes in product purchases.

The position of the PTA

As stated in the Mila answer, this is a method for dividing underlying cost on the service that is on offer. If it is decided to reduce price on one service item, then other service items must



increase accordingly, as the total cost remains unchanged. Coefficients are used to calculate equivalents of service elements, and in this manner, an assessment is made of the value of varying service elements, and in this instance this is done on the basis of the length of connections and bandwidth. The cost is then divided between connections/service elements accordingly. It is therefore not possible to reduce the price of specific connections without this having an impact on the price of other connections. There is no direct connection between cost of each connection and the price, but with equivalents it is endeavoured to take cost factors into account. In this way, for example, longer connections have more equivalents as underlying cost is dependent on kilometres.

GR pointed out that there is a reverse price difference on differing services. GR here refers to section 5.1 in the preliminary draft where it is stated that Mila MPLS-TP service is operated on the same wavelength system as new Mila Ethernet connections on the Fibre Optic Ring. MPLS-TP service is Ethernet service for wavelength where bandwidth is often shared with others, thus achieving cost efficiency. In this way bandwidth is not guaranteed. On the other hand, the Mila MDH has guaranteed bandwidth. It was therefore out of sync that MDH is sold at a much lower price than the MPLS-TP service. One can therefore deliberate on why MPLS-TP service is not the least expensive, and then, particularly for local connections, which on the other hand, are most expensive. [...]

Mila reply

Mila points out that it is not correct that Ethernet service has bandwidth that is not guaranteed. It is however possible to lease excess bandwidth (unused) at 10% of the price for guaranteed bandwidth (EIR), maximum 1 Gb/s.

The position of the PTA

It is stated in the Mila tariff for Ethernet service that this is guaranteed bandwidth. This means that the GR conjectures that broadband MPLS-TP service is often shared with others and about a reverse price difference do not apply here. What has most influence on the price difference between unit cost between Mila, MDH and MPLS-TP service, is however, cost of equipment, underlying fibre-optic in the number of sold connections (which are forecasted for new products). The same applies to the difference between connections within the Fibre Optic Ring and those outside it. The current Mila tariff on the trunk line market is based on a number of cost analyses because Mila has been offering varying service on this market and in addition to this, connections have been developing from traditional leased lines, over to Ethernet service that uses MPLS-TP equipment.

The PTA considers it appropriate that in the next review of tariffs on this market, the cost model will be reviewed in its entirety. There will probably then be a clearer picture of how demand has developed for the new products that Mila has been adding to its supply offer. For the time being, the Administration plans on the other hand to endorse unaltered structure of the tariff.



The PTA has also commenced market analysis on this market, and development of competition on the market and development in technical solutions will be examined. In that analysis there is also a possibility that a change in cost model may be prescribed if the result of the market analysis is such that Mila has SMP on this market.

Nova refers to discussion on page 21 in the preliminary draft. Mila increased the price of service in all items. That indicates that there is little done to economise in operations. There is no increased volume of transactions that could lead to reduction in prices and generally, service prices therefore always needed to be increased. Nova reiterated its position that this reflected how obsolete Mila structure was, and that was unfortunate.

Then Nova made a comment on what was said in the Mila reply to a query, where on page 22 it is stated in a Mila reply:

"It is true that there is a significant price difference in MDH products and product categories in Ethernet service. That also applies to 1 Gb/s and 10 Gb/s.

MDH 1 Gb/s costs, for example, ISK 63,791 while a corresponding 1 Gb/s in Internet service costs on the other hand, ISK 130,576, which is more than twice as much.

Offering 100 Gb/s as Ethernet service at ISK 1,339 thousand per month, while a corresponding MDH product would be ISK 818 thousand, therefore fits perfectly into the framework of the current product offer. Mila has not received comments on this price difference from its customers."

Nova doubts, or at least is not aware of the tariff in question having been opened for much discussion with Mila. When Nova has throughout the years, sought better prices from Mila, the reaction had been that because of price control obligations, discounts or special terms are not on offer.

It is then said in the continuation of the Mila answer on page 22:

"The MDH product is therefore only designed for high-volume data transfer of specialised service and only covers limited locations, in the Capital City Area and Reykjanes and to the data centre at Blönduós. As Mila is offering MDH to the data centre at Reykjanes, Mila considered it to be indefensible other than to offer MDH at similar terms to Blönduós. But the MDH product was designed for companies in the retail market that needed substantial data transfer capacity, and not for building electronic communications networks for electronic communications companies, as the Ethernet service is designed. Electronic communications companies lease Ethernet service connections and use them in a variety of electronic communications service, such as mobile phones, voice telephony and data transfer. Mila considers therefore that these products are not comparable today."



Nova, considered that in this case, Mila had been talking about apples and apples and tries to make it look like they are apples and oranges, i.e. these are products that are almost entirely comparable.

Offering data centres a better price than electronic communications companies that purchase much more service from Mila, represents unbelievably unfair business practices. The same infrastructure is in almost all respects used to provide the service, particularly when one considers that fibre-optic in the ground that forms the largest part of cost is considered to last for the lifetime of the technology. There are no cost related arguments for this price difference, and the PTA therefore appeals to PTA to review its support for this pricing.

Mila reply

Mila indicates that the Nova assertion that the fact that prices rise equally indicates that Mila is not trying to make economies in its operations, is unfounded. Mila refers to the answer here above, where it is pointed out that the cost base in that model under review here is similar to 2011, and in addition to this, that the announced price increase is well below general price changes.

In addition to this, many changes made to tariff have led to customers being able to lease many times the data volume at a lower price than before. Connections have significantly decreased in number while against this the data volume has increased many times over.

Nova asserts that the company had not been able to voice an opinion on the tariff for MDH. Mila pointed out in this connection that all tariffs for the Mila trunk line network are submitted for consultation before the PTA issues a decision on price, including MDH. It is true that Mila has no flexibility in providing discounts or special terms where the tariff is subject to PTA surveillance.

Nova finally commented on pricing of 100 Gb/s in Ethernet service categories and on the same speed in MDH, but the company considered that these were "completely comparable products." Mila disagrees with this. The cost base is for example not the same. 100 Gb/s Ethernet service does not reach all around the country and that behind it is a 900 km route as the crow flies (about 1200 km in real length). This means that the underlying cost is very high, as one has to allow for fibre-optic costs around the whole country, and in addition to this more equipment units and hosting locations are required. It is also entirely unclear how usage of these connections will be, and what impact this product will have on the current Mila revenue flow. MDH is offered in urban areas where distances are short, despite the exception of the MDH to Blönduós. Mila also expects the usage of the MDH to Blönduós to be much better than on a 100 Gb/s Ethernet service ring around the country.

Then there is the fact that the service provided with Ethernet service is different from MDH. MDH is a fixed line connection with little overhead, where the cost behind each byte (or each Gb) is lower than on Ethernet service connections.



As stated here above, data transfer capacity has been increased in accordance with market needs and the price reduced, and it is clear that if revenue from 100 Gb/s Ethernet service becomes more than the cancelled connections, the price will drop as price should be based on cost.

The position of the PTA

The PTA agrees with Nova that the identity of the customer should not be a deciding factor in pricing. Mila has specified in its answer that there is a cost difference underlying each byte, which explains the price difference between Ethernet service and MDH, as the service is different and because MDH is a fixed line connection. In the opinion of the PTA, this issue requires closer examination, but the PTA nevertheless considers that this needs to be done in a total review of the cost base of the leased line tariff, which is a necessary measure during the next review of Mila tariff for this service, or during the review of market analysis of the trunk line market which is now being conducted by the PTA. For this reason the PTA intends to endorse this structure of the Mila tariff for the time being, and that this issue should be examined more closely during the next review of Mila tariff.

Nova also referred to the following reply from Mila:

"Development of a 100 Gb/s on the Fibre Optic Ring needs furthermore to be examined with respect to the development of the trunk line network as a whole. The offer of 100 Gb/s to selected locations can result in reduction of revenue for the short term at least, as the party in question will potentially cancel a connection with less bandwidth instead.

It therefore depends on demand and on the impact on revenue of the existing leased line connections, how the lease price will develop. Mila aims to increase the offer of high speed connections, but against this needs to be mindful of the fact that when a customer leases for example 100 Gb/s, this could lead to the cancellation of a number of smaller connections."

In this answer, there is again a deviation from basing arguments on cost and thus on cost analysis. Instead of this, revenue is being taken into account that belongs to service elements that are becoming obsolete.

The fact that changes in service because of normal development, impinge on older service elements does not matter in development of this price as the approach is forward looking. Depreciation and related factors have taken account of older connections, and new investments take over in a normal manner. It is unsound to take it as given that all revenue in such transformation should remain unchanged.

Mila reply

Mila pointed out that if Nova examined more carefully the criteria given in the Mila cost analysis, it could be seen that these assertions were unfounded. Mila did of course not calculate price "blindly" based on the current status on the connections that are leased from Mila. The base is the current status and then an examination is made of whether and then what impact a



new product offer would have on Mila operations, but pursuant to the PTA decision, the lease price shall be based on cost. Mila for example absorbed a reduction in revenue when Ethernet service came onto the market, as it was clear that more expensive leased line connections would be cancelled and less expensive, Ethernet connections, would be leased instead. This was examined carefully with the PTA previously, and the Administration agreed that Mila would build its tariff in this manner, as it was considered that Mila would recoup the reduction of revenue in a relatively short period of time. In this analysis, the exponent decreased that Mila is aware that offering this service could lead to a cut in revenue when an electronic communications companies cancel x 10 Gb/s connections and lease 100 Gb/s instead. Mila revenue basically must support costs and because of obligations on price control, flexibility in pricing is small. Mila has, however, as examples prove, built a model with the aim of offering more bandwidth at the same price, but when changes are made one must examine this specifically with the PTA and provide arguments for why they are made.

The position of the PTA

When using historic costs as a basis, it is expected that Mila cost will be recouped with revenue from the sale of the relevant service. When a new product is put on the market, it is not precisely established how it will impact on revenue stream, but it is endeavoured to estimate the impact such that costs will be recouped. In the opinion of the PTA, an overall review needs to be made on division of costs in the next review of Mila tariff on this market, and the PTA plans to call for such a review during the next year.

GR refers to section 5.1, which discusses Mila tariff for 100 Gb/s connections on the Fibre Optic Ring. GR pointed out that there Mila asserts that MDH is not a suitable product for electronic communications companies on the Fibre Optic Ring. As before, electronic communications companies are purchasing this product for their own underlying systems to Reykjanes. There is no material difference in connection from Reykjavík to Reykjanes when compared to Reykjavík to Hvolsvöllur, Akureyri or Egilsstaðir. A product which is based on wavelength equipment, with dedicated bandwidth and Layer 2 service, suits electronic communications companies particularly well to operate other service on top.

Mila's MDH uses Ekinops wavelength equipment from Mila and is therefore by nature in no way a different service from the new Mila wavelength system that is covered by the Mila Ethernet tariff. One may consider it likely that MDH is and will be served on the new system as the Ekinops system is already fairly old and probably written off (See Mila, 8-year depreciation period).

With the Mila pricing policy it is clear that competition is being restrained and revenue is being maintained at the cost of service.



Mila reply

Mila refers to an answer to a comparable comment from Nova.

The position of the PTA

The PTA refers to prior discussion here above. As is stated there, the PTA intends to endorse this structure of the Mila tariff for the time being, and that this issue will be examined more closely during the next review of Mila tariff.

4 Tariffs related to Mila special agreements

Nova refers to paragraphs 46 and 47 in the preliminary draft, and points out that Mila specifies which parts cost most, i.e.: "By far the largest part of costs of the service Mila provides lies in fibre-optic, wavelength systems, wireless and control network, and that bottom layer is used for all Mila trunk line service."

When one examines these explanations and the price table on page 21, it is clear that the length component of fibre-optic in price is significantly high.

It is very unusual that there are special terms for parties that however, use the underlying infrastructure that forms the cost base in question. Other parties are thus paying for the reduction offered to these parties.

Mila reply

Mila agreed with Nova that the length component in price was certainly high, as the cost of deploying fibre-optic was substantial. In addition to this, one does not need many threads to serve the whole electronic communications network. This means that each kilometre of fibre-optic thread is not inexpensive.

Nova maintains that there are special terms on offer for parties that "however, use the underlying infrastructure that forms the cost base in question", without referring to the parties that enjoy such terms. In the PTA consultation document, reference is made to an agreement between Mila and the Ministry of Foreign Affairs on the one hand and Farice on the other, and Nova may possibly be referring to them. These agreements do not relate to the Mila general product offer, i.e. they relate to operational of fibre-optic threads owned by another party (the Icelandic state for NATO) and to long term agreement for connections to foreign countries. Other Mila customers enjoy benefits from these agreements, as the cost base for the trunk line network is reduced because of them. These agreements are subject to indexation/exchange rate changes. It is appropriate to point out that price levels have increased more than the amount of the planned increase of the trunk line agreements.



The position of the PTA

In this draft, the PTA is not discussing the content of Mila agreements with the Ministry of Foreign Affairs and Farice, but one should however note that pursuant to PTA decision number 9/2008 on a requirement for submitting price offers in specific fibre-optic connections, dated 22 April 2008, Mila is obliged to offer other electronic communications companies the same kind of access as the company offers Farice and at the same terms.

The PTA does not object to taking these agreements into account in these cost calculations by deducting revenue from them from the cost base.

GR referred to item 47 and section 4.1, where among other things Mila requests to increase all service elements equally were presented, and where it is specifically noted that such an increase would however only cover some customers. This means that Mila has at least 2 tariffs and that the intention is only to increase part of them (with respect to part of the customers). It was stated that Mila wished to retain unchanged price for Farice, the Ministry of Foreign Affairs and other parties. This must both distort calculations of necessary increases vis-à-vis those parties that purchase service on the public tariff and equally create a risk that selected parties will enjoy a lower price. It is not stated what criteria need to be in place to get the special prices in question, and one could find it likely that they would result from tenders on the basis of the parties that are particularly named.

It is known that the Ministry of Foreign Affairs has called for tenders when electronic communications companies have made an offer of service. It is confirmed in the documentation that Mila appears to have bid against them and gained at least some of the connections. GR asks the PTA whether it is the assessment of the PTA that it is normal that Mila can bid in this way against its customers and offer prices outside the agreed tariff.

Another instance that is well known is the special Kópavogur call for tenders where the municipality requested to acquire a thread in fibre-optic after a specific period of time. In that case, electronic communications companies bid for the service where the conditions of Kópavogur were fulfilled, and it is known that it was with the endorsement of Mila, otherwise electronic communications companies would not have been able to fulfil the conditions in question for ownership of fibre-optic threads. Those connections must therefore also be on a separate tariff. The above also raises various questions with respect to the Mila tariff and how public it is. GR asked whether electronic communications companies are in this way purchasing products on the one hand on the public, thus endorsed tariff, and on the other hand on a secret tariff.

This raises various questions and the GR therefore request that the PTA will examine how this arrangement is and at the same time how it relates to Siminn, which owns Mila. Does Siminn have access to a lower tariff in some instances? [...]



Mila reply

Mila referred to the answer to corresponding comments from Nova here above with respect to Farice and the Ministry of Foreign Affairs. As stated in that answer, there are price changes in these agreements.

GR states: "...in the documentation it is confirmed that Mila appears to have called...". GR says that it has possession of documents that confirmed that Mila had taken part in a call for tenders from the Ministry of Foreign Affairs and had gained at least part of the connections. In other respects, GR refers neither to which call for tenders is being referred to or what documentation lies behind it, or what they "appear to" confirm. The agreement between Mila and the Ministry of Foreign Affairs is about operation of 3 fibre-optic threads that are in a joint cable of Mila and NATO, and these 3 threads are under the supervision of the Ministry of Foreign Affairs, but owned by NATO, to the best of Mila's knowledge. Mila furthermore states that the company has not taken part in any call for tender from the Ministry of Foreign Affairs.

The Kópavogur call for tenders was for the purchase of fibre-optic threads, in accordance with prescribed conditions in the call description. This has been repeatedly discussed and there is no reason to elaborate further here.

Mila also pointed out that the company is generally authorised to take part in calls for tender, just as other parties. Mila must however ensure that the tender is on a non-discrimination basis and that the products that are subject to price control and used in the call for tenders are in accordance with the public tariff.

It is unfortunately a known method of GR to present unfounded assertions, create wrong criteria and draw conclusions from them, such as that there is a "special tariff" which "possibly only Siminn has access to". Mila rejects this GR insinuation, as Mila sells its products to all its customers at the same terms, and the same conditions, whether this party is Siminn, sales within a Mila profit centre or to other customers. Mila tariffs are furthermore all public, contrary to what is practised by GR. Mila refers to the data held by the PTA with respect to lease of connections to Siminn, where all transactions between the companies are shown and where it can be seen that there are no abnormal transactions taking place.

Mila points out that one should see the unfounded statements and assertions of Gagnaveita Reykjavíkur about Mila in the light of the fact that this is Mila's main competitor.

The position of the PTA

The PTA refers to the answer here above with respect to Mila agreements and reiterates that Mila needs to take into account obligations on non-discrimination and price control in all such agreements.

The PTA refers to the following Mila reply:

"Mila also pointed out that the company is generally authorised to take part in calls for tender, just as other parties. Mila must however ensure that the tender is on the basis of non-



discrimination and that the products that are subject to price control and used in the call for tenders are in accordance with the public tariff."

In this connection, the PTA wishes to state that if participation in a call for tenders constitutes a new product being made, Mila is obliged to offer other electronic communications companies such a product on the basis of non-discrimination pursuant to PTA decisions no. 9/2008 on requirement for delivering price offers in specific fibre-optic connections, dated 22 April 2008, and no. 21/2015 on the designation of companies with significant market power and on the imposition of obligations on the wholesale market for trunk segments of leased lines, dated 12 August 2015.

[...]

5 Opex

Nova referred to paragraph 58 in the preliminary document and considered the reason why senior management costs should rise to be non-transparent and unfounded, as were the explanations on credit entry for hosting which appears as though it had been totally overlooked. [...]

In paragraph four it is stated that there is a real increase and in addition to that there is a likelihood that efficient and economic operations are not being achieved which is the implied objective. Here there is doubt as to whether sufficient efforts have been made to achieve the efficiency in operations that one should demand, and one should at least take this into account in pricing, i.e. lowering, if there are arguments for being able to do considerably better in this respect.

Mila reply

Mila points out that the company has provided good arguments for these changes in opex in the cost model. The PTA has examined this cost and raised no objections to it. Mila considers it unnecessary to answer this item in any other way than to completely reject that Mila had not succeeded in achieving efficiency, as it can be clearly seen that Mila revenue in 2011 is similar to current revenue (which shows that the cost base has changed little), while prices have in general, increased by about 30%.

The position of the PTA

The PTA has examined the Mila opex and has no further objections to it. As is stated by Mila, opex has increased less than index increases.



6 Answers of parties to the market, to Mila answers

The PTA submitted the Mila answers with a proposal for change, to GR and Nova. No further comments were received from Nova.

In a reply from GR, dated 18 December 2020, GR pointed out that from the Mila submission one could conclude that comments had been identical to the effect that the Mila tariff hindered progress and competition in the opinion of parties to the market that seem thus to have been in agreement on the situation on the market. One can hardly see that in its submission, Mila had materially answered specific comments.

Mila specified price reductions in its submission, and as far as one could see, reference is being made to a tariff that is up to 16 years old to demonstrate price reductions of any significant degree. In its submission, Mila maintains that price reductions at this time are substantial and can be counted in tens of percentage points. If the price reductions and questions are put in the context of development of bandwidth at the same time (which is on average 40% increase per annum with larger steps in between) and at the same time with the development of delivered bandwidth in traditional home and/or corporate connections for the same period, one could in fact say that there had been a price increase. Mila had thus collected additional revenue because of normal increase of bandwidth on the market. It seems not to be taken into account that the performance capacity of equipment is multiplying during the same period, which thus increases utilisation of underlying fibre-optic with greater carrying capacity. In general, one may assume that on the time-scale used by Mila for reference in its submission, bandwidth need had increased by a factor of 150-500 and the transmission capacity of fibre-optic had increased by more than a factor of 100.

GR rejects that the company made "unfounded assertions, create wrong criteria and draw conclusions from them..." As is stated in Mila answers to GR comments. It is a fact that obligations rest on Mila because of its significantly dominant market position, while no such obligations rest on GR. GR's position is to make honest submissions, and one cannot see otherwise from Mila's replies that GR comments appear to be in accordance with comments from other parties to the market.

The position of the PTA

With respect to the comments that the Mila tariff hinders progress, PTA refers to prior answers here above. If fundamental changes are to be made on how the tariff is structured, i.e. if one should apply other factors than data transfer speed and distances, then this must be addressed in a market analysis of the market in question and subsequently submitted to parties to the market for consultation. It is also appropriate to point out that if distance categories are to be changed that the weighting of longer connections will become less, which will result in shorter connections being more expensive, other things being equal, as the cost base will not change, only the division of costs. The PTA plans in this instance to endorse the Mila request that the tariff structure remain unchanged.



With respect to development of the tariff and Mila's comparison, one can look at this in a number of ways but it is clear that one reaches different conclusions depending on the years that are compared. As has previously been stated, the increase in question from the current tariff is within the increase in index.

In other respects, the PTA considers it unnecessary to further discuss the comments from the companies.