Appendix A-1

Fjarskiptastofa

Summary of market analysis in Europe concerning the geographical definition of markets

Annex for market analysis of wholesale markets for local access with fixed connection and central access with fixed connection for mass-produced products

(Markets 3a / 2016 and 3b / 2016)

19 October 2021

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1 Geographical definitions of electronic communication markets in Europe

1.1 In general

1. BEREC´s Common position on geographical analyses of 2014 includes a review of the market analyses of NRA´s in Europe with regard to issues relating to the geographical segmentation of electronic communications markets and/or the application of different remedies to undertakings with significant market power by areas. This was a review of analyses that had been carried out since the ERT report on the geographical division of markets from 2008 came to light until 2014.[1]

2. On 6 December 2018, BEREC published a Common report on the experience of the applying of the above-mentioned Common position af BEREC regarding geographical analysis from 2014[2]. There it is e.g., stated that increased competition in European electronic communications markets between electronic communications undertakings, which often rely on different electronic communications infrastructures, would have led the NRA´s to focus on the geographical demarcation of markets. Electronic communications undertakings that rolled-out their own electronic communication networks and those that used the access to networks of dominant parties did not necessarily provide electronic communications services nationwide and would also offer different speeds and/or quality in some instances depending on the area in question.

3. The latter report also states that since BEREC´s Common position was published in the summer of 2014, it has been supported by many NRA´s. Furthermore, the European Commission had published new recommendation on the relevant markets which are susceptible to *ex ante* obligations in October 2014 and new Guidelines on market analysis and assessment of significant market power in May 2018. These documents contained discussion and guidelines on the geographical demarcation of electronic communications markets but were broadly consistent to the above-mentioned Common position of BEREC from 2014.

4. The main purpose of the above-mentioned BEREC report from 2018 was to provide an overview of the experience of NRA´s concerning the geographical demarcation of markets in light of the increasing importance of such demarcation. The report gives a picture of the situation until May 2018. At that time, fourteen European countries had applied geographical demarcation or different remedies by areas, but nineteen had not. As can be seen in the figures below from the report in question, it was much more common for such measures to be related to the wholesale market for central access provided at a fixed location for mass-market products (market 3b)[3] than the wholesale market for local access provided at a fixed location (market

[1] In the ERT report in question, the cases that had emerged up to 2008 and concerned the geographical demarcation of markets were discussed. In the case of the markets in question, the most important are cases involving the UK from 2007, Austria from 2007 and Portugal from 2008, all of which concern the bitstream market. In the above case of the UK, OFCOM divided the geographical market into more than one market. The competition areas were defined as areas where a certain number of competitors had to be present, in addition to which the dominant undertaking (BT) had less than 50% market share in the area in question.
[2] See BEREC report on the application of the Common position on geographical aspects of market analysis – BoR (18) 213 of 6 December 2018.
[3] What used to be called wholesale broadband access.

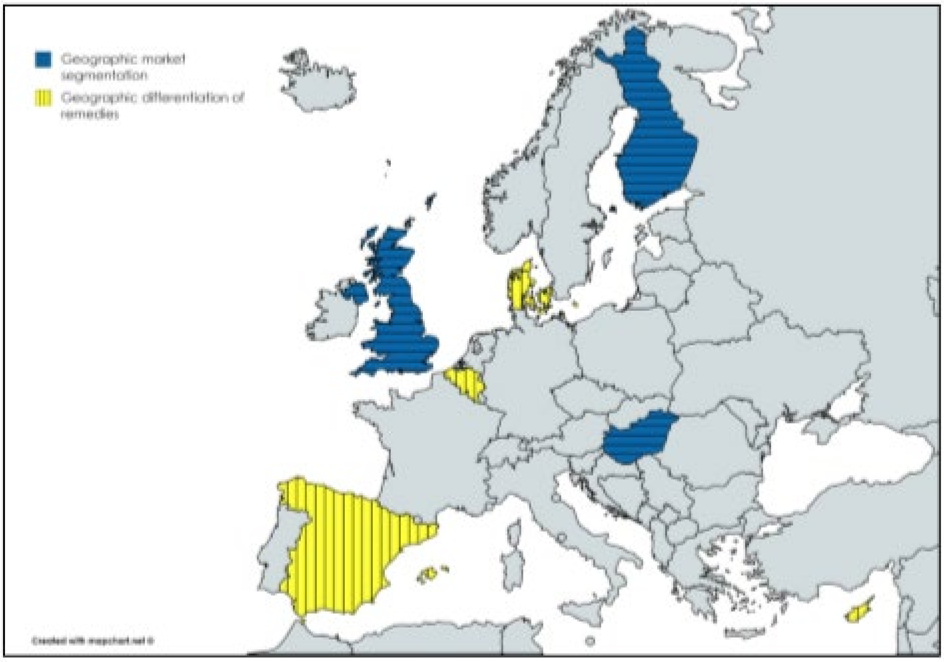
3a)[4]. Seven countries had applied such measures in market 3a while twelve countries had applied them in market 3b.

Table 1: Overview of cases with/without geographic segmentation (as of May 2018)

<table>
<tr><th></th><th>market 3a</th><th>market 3b</th><th>market 4</th><th>other markets</th></tr>
<tr><td rowspan="4">geographic market segmentation</td><td></td><td>BE[39], DE, ES, IE, PL</td><td>AT</td><td>BE[40], ES[41]</td></tr>
<tr><td colspan="2">HU</td><td></td><td></td></tr>
<tr><td colspan="3">FI, UK</td><td></td></tr>
<tr><td></td><td colspan="3">PT[42,43]</td></tr>
<tr><td rowspan="4">geographic differentiation of remedies in a national market</td><td>CY, ES</td><td>SI</td><td>IE[44]</td><td></td></tr>
<tr><td></td><td colspan="2">FR</td><td></td></tr>
<tr><td colspan="2">DK</td><td>PT[43]</td><td></td></tr>
<tr><td colspan="3">BE[39]</td><td></td></tr>
<tr><td>no geographic segmentation</td><td colspan="4">BG, CH, CZ, EE, HR, GR, IT, LI, LT,LU, LV, ME, MT, NL, NO, RO,[45] RS, SE, SK</td></tr>
</table>

5. As shown in the figure below, only three countries had demarcated separate geographical markets in market 3a in May 2018, i.e., the UK[5], Finland and Hungary. As stated before, this is for historical reasons, as no single electronic communications undertaking in the states reaches the country in question as a whole and the electronic communications networks in question generally does not overlap. In addition, four countries had imposed different obligations according to areas in the market in question at that time, i.e., Denmark, Belgium, Spain and Cyprus.

Map 1: Regulatory approaches in Europe – Market 3a



[4] What used to be called wholesale (physical) network infrastructure access at a fixed location.
[5] The UK has now left the EU and is no longer part of the EEA area.

6. It is appropriate to discuss the situation in Hungary better. In market analysis in 2011 in the current markets 3a and 3b, the markets were divided geographically into three according to the location of the three non-overlapping electronic communications networks in the country and the three companies were designated as electronic communications undertakings with significant market power in their areas. A new market analysis was carried out in Hungary in 2017. Circumstances had changed so that new electronic communications undertakings had begun to establish themselves within the areas of operation of these electronic communications undertakings with the expansion of their own infrastructure. The result in 2017 was to divide the country into six areas so that the area of operation of each of the above three parties was divided into two areas, i.e., on the one hand, competitive areas and, on the other hand, areas with limited competition.

7. Since May 2018, two countries have been added to the group of the three countries that have demarcated the geographical market in 3a, i.e., Italy and Poland. In July 2019, the EU Commission agreed to the market analysis draft of AGCOM, the Italian NRA[6], which assumed that Italy would be divided into two areas in the market in question, i.e., Milan on the one hand and the rest of Italy on the other. The reason why Milan was considered a separate market was that there were three different access networks, i.e., two networks outside the network of the old dominant party. The result was that there was active competition in that city in the market in question and therefore obligations were lifted on the former dominant party. Furthermore, different geographical obligations were provided for in the market analysis in question. This Italian case and the case of Poland[7], as well as the cases of numerous other European countries concerning geographical measures, will be discussed in more detail later in Section 1.2 of this Appendix.

8. As can be seen in Table 1 above, four countries had applied different remedies in market 3a at the time in question, i.e., Denmark, Belgium, Spain and Cyprus. Italy was added in 2019, as the above-mentioned decision of AGCOM, as stated before, provided for bot separate geographical markets and different remedies. Therefore, nine countries have applied geographical measures in market 3a. It can be said that two other countries apply different remedies in market 3a, i.e., Sweden and Ireland. In Sweden, PTS has allowed Telia to charge different prices depending on population and type of housing. In Ireland there are different prices for masts, ducts and access to black fibre-optics by areas.

9. Therefore, ten countries within the EEA apply geographical measures in market 3a today. However, about twenty countries have not applied any geographical measures in the market in question. According to the above, four countries within the EEA separate geographical markets in market 3a, in addition to the UK, which is no longer in the EEA. In addition, six countries impose different obligations, in addition to Italy, which both differentiates geographical markets and imposes different obligations.

10. As mentioned above, a number of countries have applied geographic measures in the wholesale market for central access provided at a fixed location for mass-market products (market 3b). This should not come as a surprise, as competitive conditions are more likely to vary between areas the lower down the market value chain. In many parts of Europe, obligations in market 3a have led to increased competition in the bitstream market, as it is clear that wholesale obligations in market 3a should generally affect the competitive situation in market 3b for the better. The introduction of wholesale services is usually not evenly distributed

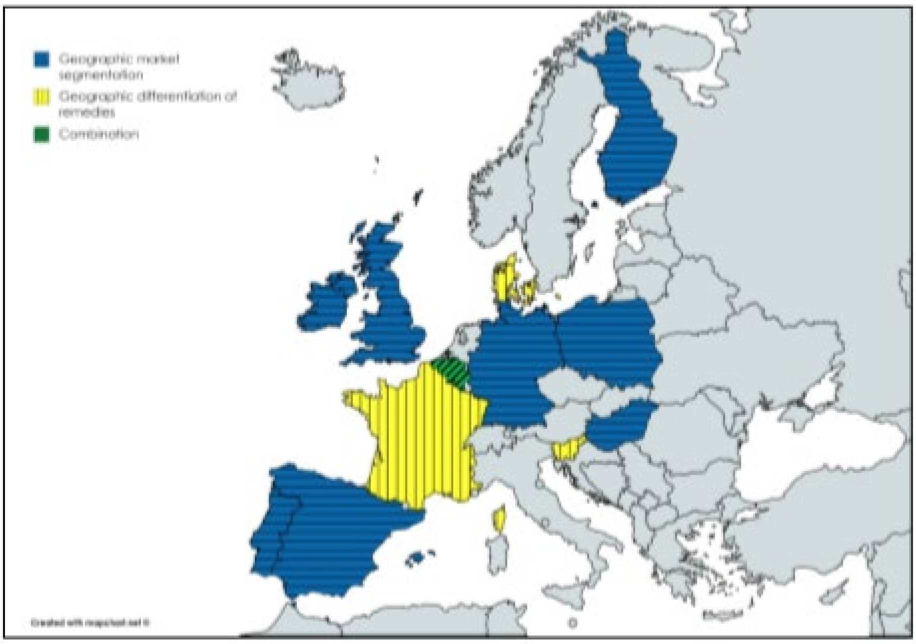
[6] See IT/2019/2181-2102.
[7] See PL/2019/2160.

across the relevant country, but usually begins in urban areas. This increases the likelihood of a geographical difference in competitive conditions in market 3b.

[8]. In the summer of 2019, Italy and Lithuania joined the nine countries that had differentiated geographical markets and the four countries that had applied different obligations by areas. Therefore, thirteen countries within the EEA have applied geographical measures in market 3b, in addition to the UK, which is no longer within that area. However, close to twenty countries have not taken any such measures in the market in question.

Figure 2 Regulation regarding geographical measures in Europe in market 3b until May 2018

Map 2: Regulatory approaches in Europe – Market 3b



12. The above-mentioned BEREC report from 2018 also explains the reasons for the increased importance of geographical analyses in markets 3a and 3b. The main reason is said to be, on the one hand, the rolling-out of next-generation networks (e.g., fibre-optic networks), both on the behalf of the former monopolies and their competitors, and, on the other hand, the introduction of mandatory access to electronic communications services. The latter reason applies primarily to market 3b. BEREC believes that as this trend continues, the importance of geographical analysis will increase even further in the future.

13. The report also explains the main reasons for the different competitive conditions between areas. Regarding market 3a, the reason is first and foremost the spread of the next

[8] As will be explained in more detail later, the Belgians have both differentiated the market geographically on market 3b and applied different obligations, as the service market is divided into two.

generation of competitors´ networks of dominant players (e.g., in the form of fibre-optics or cable networks). Furthermore, the market share of the dominant party in wholesale and/or retail has decreased and is beginning to reach certain limits (usually based on 40% or 50%). Regarding markets 3b, the same reasons are mentioned, in addition to the introduction of mandatory access to wholesale services in market 3a.

14. The report also stated that the vast majority of countries that had applied geographical measures had started by assessing whether there was a geographical difference in the competitive conditions in related retail markets, if there were no wholesale regulation in place (modified greenfield approach). The NRA´s in question considered such a retail analysis to be an important basis for the analysis at the wholesale level.

15. The report also sets out the criteria used by NRA´s when demarcating geographical markets. It was stated that usually a large number of areas were analysed on the basis of specific criteria, which were then divided into two or more units where the competitive conditions were then divided into two or more units where the competitive conditions were broadly comparable. These criteria would have been based primarily on market structure indicators, e.g., the spread of competitors´ networks, the market share of dominant parties and the number of "significant" competitors, rather than the market outcome, e.g., pricing in retail or wholesale or product features.

16. The selection of relevant areas is also discussed in the report in question. It was stated that the vast majority of NRA´s based the selection on administrative units, e.g., municipalities or postcodes. Very few relied on the network structure of the dominant party, but none on the network structure of competitors alone. The reasons for choosing administrative units were e.g., that they were clearly demarcated and stable enough to ensure homogeneity and large enough to be able to analyse competitive conditions clearly without undue workload on market participants or the relevant NRA.

17. The report also discussed the number of identified areas within the countries concerned. The conclusion was that the number of areas that NRA´s examined in geographical analyses could be very different and partly depend on the size of the country in question. Typically, these ranged from a few hundred to several thousand areas that were reported and collected by NRA´s.

18. After analysing the areas, the next step would usually be to classify those areas where comparable competitive conditions prevailed. Usually, the areas were then classified as competitive areas on the one hand and areas where there was no or little competition on the other. Different criteria could be used for such classification. In market 3a, it was most common to use, on the one hand, the criterion that a certain number of the dominant party´s competitors had expanded its own infrastructure beyond certain limits and, on the other hand, that the dominant company´s market share had fallen below certain limits. The same could be said of market 3b, where it was also common to have criteria for the number of competitors of the dominant party. There would then usually have to be "significant" competitors who reach e.g., 10-15% market share at the minimum. In the countries in question, the distribution requirement would have ranged from 20-75% (usually between 50% and 75%). The benchmark for the dominant company´s market share would be either 40% or 50%.

19. It is also stated in the BEREC report in question that most NRA´s had taken into account expected future developments in the implementation of geographical measures. This would

have taken into account both the expected development of market share and the expected development of the next generation of networks, including fibre-optic networks.

1.2 Overview of market analyses in Europe concerning the geographical definitions of electronic communications markets

1.2.1 In general

20. In order to better understand the requirements made by the EU Commission and ESA for geographic analysis, discussion will be provided here below on most analyses that have been made within EEA states on those markets here under discussion, to the current date. They include the following cases:

1. Czech Republic (2012)
2. Spain (2015)
3. Cyprus (2016)
4. Hungary (2017)
5. France (2011, 2017 and 2020)
6. Portugal (2017)
7. Slovenia (2017)
8. Denmark (2017)
9. Ireland (2018)
10. Finland (2018)
11. Latvia (2018)
12. Belgium (2018)
13. Norway (2018)
14. United Kingdom (2018-2019)
15. Greece (2019)
16. Germany (2015 og 2019)
17. Italy (2019)
18. Poland (2019)
19. Lithuania (2019)
20. Holland (2019)
21. Sweden (2019-2020)

1.2.2 Czech Republic

21. In the case of the Czech Republic from 2012,[9] the Czech NRA (CTU) decided to divide the geographic market for the bitstream market (Market 5) into two units based on varying competitive conditions between areas. The CTU considered that there was effective competition in those areas where at least three technical solutions[10] were being offered and where the market share of the SMP operator (TCR) did not exceed 40%. The EU Commission expressed serious doubts about the CTU conclusions and considered that the institution had not provided sufficient proof that the retail offers through cable and Wi-Fi systems exerted direct or indirect competitive constraints on the wholesale market for bitstream access through xDSL or fibre-optic, nor that such constraints had such an influence on the competitive environment on the relevant market that justified geographic segmentation of the market. TCR had been the only operator that offered a convincing wholesale product at a national level on the relevant market and the company's prices were the same across the whole country. The Commission therefore exerted its veto and the geographic segmentation in question did not come into effect in the Czech Republic.

1.2.3 Spain

22. In December 2015 the EU Commission endorsed a draft market analysis by the Spanish NRA (CNMC) of markets 3a and 3b.[11] The CNMC conclusion was to the effect that on market 3a, the geographic market should be the whole country but differentiated obligations should be imposed by area. This was elaborated in such a manner that the SMP operator, Telefonica, was required to provide what is called local NEBA virtual access to fibre-optic across the country with the exception of what are called the UFB municipalities.

23. In market 3b, the geographic market was segmented into Area 1 (competitive) and Area 2 (non-competitive). 758 municipalities of 8867 were categorised under Area 1, but they however have more than half of all Telefonica copper lines.

24. It is considered appropriate to further discuss the CNMC methodology for the geographic analysis. In the light of the position on the retail market and foreseeable deployment of next generation networks (NGNs), the NRA prescribed two criteria for assessing competitive areas that both had to be fulfilled (telephone exchange areas):

- **Criterion 1:** a) At least two competitors of Telefonica need to be operating in the relevant telephone exchange area, either on their own infrastructure or through local loop lease from Telefonica, where both parties have at least 10% market share in retail and b) the Telefonica market share is less than 50%.
- **Criterion 2:** Endeavour to project future infrastructure competition on NGNs. The condition is fulfilled within telephone exchange areas where at least three NGNs are in place, each having individually at least 20% deployment.

[9] See CZ/2012/1322.
[10] In the Czech Republic, there were xDSL systems, and cable systems almost all of the country and Wi-Fi systems were widely available.
[11] See ES/2015/1818 and 8919.

25. It should be noted that in the case of Spain from 2008[12] the Spanish NRA (CNMC) planned to impose differentiated obligations on Telefonica on the then bitstream market between areas where the NRA deemed that on the one hand, there was greater competition and on the other hand, less competition. The areas with effective competition were on the one hand, defined as those areas where deployment of cable systems reached at least 60% and where two of the three local loop operators were present. On the other hand, areas where all three local loop operators were present in the area and where Telefonica had less than 50% market share. CNMC planned to refrain from imposing price control obligations on Telefonica in those areas where the NRA considered there to be effective competition. The EU Commission deemed that CNMC had not successfully demonstrated that differing competitive conditions existed within Spain that could justify the varying obligations, and the CNMC therefore withdrew the above specified plan. In the opinion of the Commission, the varying competition conditions should be characterised by factors such as these:

- Differing marketing by electronic communications operators between areas.
- Indications of lower retail prices in the competitive areas.
- Differing service functionality or service offer between areas.
- Declining Telefonica market share in wholesale and retail.
- Stable boundaries between areas.
- Indications of an overall trend towards effective competition in the competitive areas.

1.2.4 Cyprus

26. In December 2016 the EU Commission endorsed a draft market analysis by the Cyprus NRA (OCECPR) of markets 3a and 3b.[13] No geographic measures were taken on market 3b, but on market 3a the geographic market was defined as the whole country, but differentiated obligations were imposed on the SMP operator (CYTA) with respect to deployment of vectoring on copper lines in the countryside on the one hand, and in urban areas on the other. The Commission noted that the geographic analysis could have been more detailed and meticulous but did not exercise its veto.

27. It is worthy of note that on 28 June 2018, the EU Commission endorsed the OCECPR draft market analysis of the market for high quality wholesale access provided at a fixed location.[14] In that case, the OCECPR took no geographic measures, where inter alia issues such as access, pricing and service terms were considered sufficiently homogeneous at a national level. The Commission pointed out, however, that competitors of CYTA had deployed their own electronic communications networks in urban areas. And furthermore, that it was certainly true that there was no obligation to differentiate geographic markets if NRA did not identify a difference in competitive conditions which is adequately stable and sustainable. The Commission finally pointed out that varying levels of infrastructure competition or varying

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[12] See ES/2008/0805.
[13] See CY/2016/1882 and 8919.
[14] See CY/2016/2084. This is Market 4 according to the Recommendation in force. This market is similar to the market previously called terminating segments of leased lines.

competitive pressure between areas should have been taken into account when elaborating obligations.[15]

1.2.5 Hungary

28. In the market analysis from 2011[16] of the current markets 3a and 3b, markets were segmented geographically into three on the basis of the location of the country's three electronic communications networks that did not overlap (i.e., Magyar Telecom, Invitel and UPC) and the three companies were designated as electronic communications companies with SMP in their areas.

29. A new market analysis was conducted in Hungary in 2017[17]. Circumstances had changed such that new electronic communications companies were making their presence felt within the operational territories of these electronic communications companies with deployment of their own infrastructure (e.g., FTTH and cable systems). The conclusion in 2017 was to segment the country into six areas such that the operational territory of each of the above specified three parties was divided into two areas, i.e., on the one hand, competitive areas and on the other hand, areas with limited competition. The companies were thus still designated as having SMP in the areas with limited competition, but no operator was in such a position in the competitive areas (deregulation).

30. The competitive areas were decided such that there had to be a minimum of two competitors of the SMP operator that operated their own infrastructure (i.e., a total of three companies 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 of the area in question. The competitive areas in question cover about 20% of the country's population.

1.2.6 France

31. In the case of France from 2017[18], the French NRA (ARCEP) came to the conclusion that the geographical market for markets 3a and 3b was the whole country. ARCEP imposed on the other hand, differing obligations on the SMP operator (Orange, previously France Telecom) on market 3b. Price control was not to apply in areas where wholesale access for central access provided at a fixed location for mass produced products was available from parties other than Orange, but was only to apply in areas where Orange was the only such

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[15] On page 6 in the Commission Opinion, it is stated: *Based on OCECPR´s analysis, in particular its observation that alternative providers are expanding their networks mainly in urban centres and less so in rural areas (where demand appears to be virtually non-existent), the Commission invites OCECPR to conduct, before adopting its final measure, a more granular assessment of competitive conditions on a geographic basis and across different bandwidth segments. On this basis,* ***OCECPR should consider imposing a lighter set of remedies in the more competitive areas and/or bandwidth segments, where appropriate.*** *The Commission further calls on OCECPR to constantly monitor the development of market conditions both at retail and wholesale level throughout the upcoming regulatory period,* ***with a particular focus on the geographic distribution of infrastructure developments,*** *demand conditions, market shares, price differences and other variations in competitive parameters across the national territory."* (PTA emphases edit)

[16] See HU/2011/1190-1191.

[17] See HU/2017/2021-2022.

[18] See FR/2017/2030 and 2031.

operator.[19] It was stated that 10,760 MDFs belonged to areas without competition, where 14% of the French population lived.

32. In 2011[20], Market 5, which was then in force, (now market 3b) was defined as the whole country, and differentiated obligations comparable to the above were applied as in the case here above from 2017. The EU Commission expressed doubts about the above specified geographic measures but did not exercise its veto, but rather directed the recommendation to ARCEP that it conduct a detailed geographic analysis. ARCEP should, among other things assess all relevant parameters related to market structure (e.g., network deployment and market share) and behaviour of parties to the market (e.g., pricing and service offer), analyse varying competitive conditions and assess the need for obligations. ARCEP should also identify areas where fibre-optic deployment had taken place in areas where competition at retail level had become effective because of access for competitors of Orange to the company's copper network.

33. On 26 October 2020, ARCEP published a new draft market analysis in the above markets to the EU Commission. On 26 November 2020 the Commission published its opinion and agreed with certain comments[21]. ARCEP considered that the wholesale markets in question consists of both copper and fibre-optic connections, as there is a demand substitute between these technological solutions.

34. ARCEP believed that market 3a was still the whole country geographically, despite the fact that the Administration had carried out a detailed analysis of 14 different areas with different characteristics, e.g., population density, number of electronic communications infrastructures and technological solutions. There was not enough competition in any area.

35. ARCEP continues to apply less severe obligations in market 3b (not price obligation), but the Administration does not consider it necessary to separate specific geographical markets. On the one hand, there are urban areas with 106 municipalities with a population of 7 million, where competition has developed in such a way that Orange´s competitors offer bitstream services at the wholesale level via copper networks and Orange has a limited market share. ARCEP believes that there is active competition in that area. On the other hand, the rest of France where such competition in copper networks has not developed in the same way. Orange has significant market power there.

36. ARCEP continues to exclude obligations on Orange´s fibre-optic connections to homes, in order to encourage further fibre-optic roll-out, but it should be noted that in France "symmetrical" legislation is in force that applies to specific access to fibre-optic networks of all parties that rolls-out such networks.

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[19] In a footnote on page 3 in the Commission Opinion it states, when dealing with the differentiated price control obligations in question, initially imposed with an analysis from 2011: *"ARCEP identified a geographic area where only one operator was able to provide a bitstream offer and a second geographic area where several operators were able to provide such a product."*

[20] See FR/2011/1213-1214.

[21] See FR/2020/2277-2280.

37. The EU Commission commented on that the number of competitors in a given area was not sufficient to assess the level of competition. Even in areas defined by ARCEP with limited competition, different competitive conditions existed. The Commission therefore requested a more detailed geographical analysis from ARCEP but did not exercise its veto power. ARCEP maintained its intention in its final decision, but only added an analysis of the impact of Orange´s competitors' electronic communications networks.

1.2.7 Portugal

38. In 2017 a new market analysis of markets 3a and 3b came into force in Portugal.[22] Geographic measures were not applied on market 3a. Geographical segmentation of market 3b was however prescribed as was the case in the former analysis of the relevant market from 2008[23]. The situation on the retail market and Portugal at this time was such that the SMP operator, MEO, had 48% market share of the service market in retail, which was composed of broadband service over copper, fibre-optic and cable systems. The next largest operator (NOS) had 34%, Vodafone had 12%, Apax had 5% and others had negligible shares. In Portugal, as in Iceland, the former incumbent monopolist (MEO) does not have the largest fibre-optic deployment, but rather NOS. NOS is however a powerful player on the retail market for broadband service in Portugal, unlike GR in this country. Geographic segmentation is now based on municipalities instead of telephone exchanges, as was the case before, because of declining importance of copper local loops and greater importance of fibre-optic and cable systems. ANACOM divided the retail market into two units, i.e., broadband access in competitive areas on the one hand, and broadband access where competition was not in place on the other hand.

39. A municipality is considered a competitive area if either of the conditions below is fulfilled.

- At least two network operators apart from MEO that both have achieved more than 50% deployment of NGNs (fibre-optic and/or cable system).
- One network operator apart from MEO has more than 50% deployment of NGN and the market share of MEO in retail is less than 50%.

40. Competitive areas were 466 of something over 3000 (approximately 50% percent of inhabitants). MEO market share in retail was on average 36% in these areas (and had been declining), but was 84% in areas where effective competition was not in place (and had been on the increase).

41. MAO had 50% market share in wholesale on market 3a, and as stated above there were no geographic measures applied on that market. MEO was designated there as a company with SMP. ANACOM however, imposed no obligations on MEO with respect to fibre-optic, despite the company's position as an electronic communication undertaking with significant market power. It should be noted that at this point in time, only 3% of all fibre-optic connections was owned by MEO. The EU Commission raised serious doubts about this issue but ANACOM

[22] See PT/2016/1888 and 1889. The final decision of the Portuguese NRA (ANACOM) is dated 23 March 2017.
[23] See PT/2008/0851.

ignored them and continued as before. It should be noted that the EU Commission does not have a veto in matters relating to the elaboration of obligations, no more than ESA has with respect to EEA states.

1.2.8 Slovenia

42. In the case of Slovenia from 2017 the EU Commission endorsed a draft market analysis by the Slovenian NRA (AKOS) of markets 3a and 3b.[24] AKOS prescribed no geographic measures on market 3a, but on market 3b the NGA planned to define the whole country as a single market and to apply differentiated geographic obligations, i.e., to withdraw price control obligations on NGNs (fibre-optic and VULA on upgraded copper lines) in competitive areas and instead to prescribe an Economic Replicability Test (ERT). The price control obligation on the SMP operator (Telekom Slovinje – TS) was withdrawn in 159 areas (2.6% of the areas) where over 30% of inhabitants of Slovenia live. For an area to be considered competitive it had to fulfil all of the following criteria:

- Infrastructure of TS competitors deployed to at least 65% of households. According to AKOS, such deployment was an adequate indication of doubled or multiplied infrastructure and the possibility for those requesting access to choose between wholesale access options from more than one operator.
- TS retail share less than 40% on the basis of broadband connections.
- At least 65% of households in the area are connected to TS copper or fibre-optic distribution frame which has at least 500 lines. In the opinion of AKOS, such a level of deployment should make the local loop market an economically feasible option for TS competitors. The fact that it is feasible for such parties to move from bitstream to local loop lease should impose constraints on TS price increases for bitstream service.

43. In the opinion of AKOS, these lighter price obligations should stimulate investments in the deployment of high-speed networks, both by TS and by the company's competitors. The EU Commission raised minor objections about the AKOS choice of geographic areas but did not exercise its veto.[25] The Commission encouraged AKOS to conduct a detailed geographic analysis before a regular review of the relevant markets recommenced.

1.2.9 Denmark

44. In the case of Denmark from 2017, the EU Commission endorsed a draft market analysis by the Danish NRA (DBA) of markets 3a and 3b.[26] The markets were not geographically segmented, but differentiated obligations were imposed on the SMP operator (TDC). It was stated in the above specified draft that the retail market was characterised by a high level of competition between access networks (copper, fibre-optic and cable). The TDC position was very strong on the retail market at a national level (56%). The next largest operator

[24] See SI/2017/2004 and 2005.

[25] On page 8 in the Commission Opinion, it states: stated: *"Some of the geographical units chosen by AKOS may be characterised by possibly heterogeneous competitive developments within the settlement area, and competitive conditions may, therefore, not be stable over time."*

[26] See DK/2017/1993 and 1994.

had 12% market share, and that is SE/Stofa which provides service over its own fibre-optic and cable systems. SE/Stofa was the main broadband provider in some areas. All other electronic communications companies had a market share of less than 10%. TDC had 76% market share on market 3a and 63% on market 3b at national level. TDC was the only operator with national coverage, with about 99% of external sales.

45. DBA examined whether the identified difference between competitive areas called for segmented geographic markets. This proved not to be the case. On the other hand, the NRA decided to apply lighter obligations in competitive areas than in other areas, i.e., on fibre-optic. Post codes were used to define the areas. The rule was that a "competitive area" needed to fulfil all of the following conditions:

- TDC market share on the retail market under 40% in 2016 and where it was projected that the company would be below 40% in 2018.
- Deployment of at least two NGNs owned by TDC competitors that reached at least 75% of the households in the relevant area.
- The area includes more than 25,000 households, either separate or in groups with other neighbouring areas.

46. 50 of 592 areas fulfilled this condition (275,000 households of 2,500,000). None of them are in cities, all in the countryside.[27] In the opinion of DBA, access to the TDC copper network with national coverage was still the key to competition in service. The take-up of wholesale access by TDC competitors was not sufficient to justify separate geographic markets. Despite competition from local networks, TDC was still offering the same price across the country, both in retail and wholesale. The TDC copper price was furthermore a deciding factor in pricing decisions made by TDC competitors, regardless of the type of infrastructure.

47. As previously stated, the EU Commission endorsed the draft market analysis in question. The Commission directed a recommendation to DBA to closely monitor competition development in "competitive areas" and to update if necessary, the geographic analysis before the next general review was conducted. DBA also needed to ensure that attractive/economic options were available in areas where obligations were withdrawn on TDC fibre-optic.

1.2.10 Ireland

48. In the case of Ireland from 2018[28], the Irish NRA (ComReg) notified a new draft market analysis of markets 3a and 3b to the EU Commission. ComReg defined the service market on market 3a such that the fibre-optic networks of Eircom did not belong to the market, as in the opinion of ComReg they were at such an early stage in deployment. The EU Commission

[27] On pages 4-5 it states: *"In terms of the geographic dimension of the market, DBA conducted an extensive analysis and concluded that it expects the relevant geographic market to be national in scope over the forthcoming review period.* ***DBA´s analysis showed that there were certain geographic differences in competitive conditions.*** *DBA also finds geographic differences in TDC´s retail market shares: there are 69 postal code areas where TDC´s market share is less than 40%, which tend to overlap with the postal code areas where there is parallel infrastructure. However, DBA points out that* ***competition from regional alternative infrastructures has not led TDC to adjust either of wholesale or retail prices on a regional level.****"* (PTA emphases edit)

[28] See IE/2018/2089-2090 (definition of service markets, definition of geographic markets and designation of an operator with SMP) and IE/2018/2115 (obligations).

expressed doubts about this but did not exercise its veto as this issue did not have an impact on the conclusion of the analysis with respect to designation of an operator with SMP and on the elaboration of obligations, in addition to which the deployment of such networks was very limited. The Commission directed a recommendation to ComReg to include them in the next analysis.

49. No geographic measures were applied on market 3a. Market 3b was however divided geographically into two units:

1. Urban WCA market (145 telephone exchange areas where all the relevant criteria were fulfilled)
2. Regional WCA market (1058 telephone exchange areas)

The criteria in question are:

1. Telephone exchange areas where at least three primary operators (i.e., BT, Eircom, SIRO, Virgin and Vodafone) could within a short space of time provide access on market 3a, access on market 3b or retail broadband service.
2. Telephone exchange areas where Eircom has less than 50% market share in retail.
3. Telephone exchange area where some primary operator that uses third-party access on market 3a has at least 10% market share at a national level.
4. Telephone exchange area where some competitor of Eircom provides, or could provide within a short space of time, retail broadband service to at least 30% of households in the area and in the telephone exchange area where some Eircom competitor has at least 10% market share at a national level.
5. On a case-by-case basis if a telephone exchange area:
    - Fails on only one criterion of numbers 2-4 here above.
    - Fails on only one criterion of numbers 2-4 here above and an Eircom competitor has at least 60% market share in the area in question.

50. ComReg came to the conclusion that different prices should apply to masts, ducts and access to black fibre-optics by areas.

51. The EU Commission raised no objections to the above specified geographic analysis of ComReg.

52. Eircom was designated as a company with SMP on market 3a and on a Regional WCA market. Effective competition was considered to be in place on Urban WCA markets, where there should be no obligations in force.

1.2.11 Finland

53. In the case of Finland from 2018, the Finnish NRA (FICORA) notified a new draft market analysis of markets 3a and 3b to the EU Commission.[29] In 2017, FICORA had defined 115 geographic markets by municipality and planned to designate 21 electronic communications companies as having SMP. The Commission raised serious doubts about the draft, which led to FICORA withdrawing it. The most serious objections related to the elaboration of price control.

54. The Finnish electronic communications market for fixed lines is rather special for historic reasons. There are 21 electronic communications companies with SMP there, each in its own area, and in addition they tend to have access between each other. Three companies are the largest i.e., DNA (35%), Elisa (29%) and Telia Finland (26%). Most other electronic communication companies are in an association called Finnet. All of these companies are vertically integrated and thus operate both at wholesale and retail level and they operate both copper and fibre-optic networks, in addition to which a number of them operate cable systems. The competitive environment in that country is thus not such that there is one operator with SMP that competes with a number of other smaller electronic communications companies. Apart from that, in the year 2017, there were about 50 local networks owned by cooperative companies or municipalities that had deployed fibre-optic networks in rural areas, i.e., in areas not covered by the fibre-optic network of the SMP operator. Most of these local networks are not vertically integrated. They variously sell wholesale access to their networks to a number of electronic communications companies that operate at retail level or have chosen one operator to provide service on their networks for a specific period of time, subsequent to a bid for tenders. Many of them have received state aid and must therefore provide access at a fair price with non-discrimination as a guiding light. The few parties that operate vertically integrated offer wholesale access to other electronic communications companies.

55. The EU Commission raised many doubts about the above specified FICORA draft market analysis, among other things about the NRA’s plans to fail to consider designating the little rural networks as having SMP, and as appropriate, imposing relevant obligations on them. In the opinion of the Commission, FICORA should have made a better examination of their market behaviour, particularly with regards to pricing and conditions for access.[30] As stated previously, FICORA withdrew the draft.

56. On 21 February 2018, the EU Commission endorsed a revised FICORA draft market analysis on the relevant markets.[31] Market definition, both of service markets and geographic

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[29] See FI/2017/1991 and 1992.

[30] In a news item from Cullen, dated 14 July 2017, on this matter, the following was stated among other things: *“FICORA proposed not to designate local fibre cooperatives and municipal companies as having SMP in markets 3a and 3b. FICORA argued that the aim of these open-access operators is to make reasonably priced and high-quality retail broadband access services available to end users in otherwise underserved geographic areas. Therefore, according to FICORA, their competitive behaviour differs significantly from the behaviour of profit maximising vertically integrated incumbent operators. The EC acknowledged that passive wholesale network providers typically give rise to fewer competition risks, and that most of these local fibre operators must provide non-discriminatory access because they have received state aid. However, the EC considered that FICORA should further justify not imposing any ex-ante regulation on these operators, irrespective of their business model or state aid conditions. The legal status … or the question by whom these operators are controlled is irrelevant for the existence of SMP. According to the EC, it cannot be excluded that they exert a certain market power in the areas where they have reached already a SMP position. Therefore, FICORA should have further investigated their actual behaviour, in particular wholesale prices and other access conditions.”*

[31] See FI/2018/2052 and 2053.

markets, was the same as in the above specified analysis from 2017. This means that FICORA segmented 150 geographic markets. FICORA did however make various changes to its prior draft and investigated various parameters better after having conducted a new national consultation.

57. FICORA did not however change its prior plans to not designate small local networks as having SMP in their areas but conducted a detailed analysis of them. This in an EU Opinion on the new analysis, it was stated that these networks generally used an open business model with respect to access. As the majority of them had received state aid for development, they were bound by obligations contingent on the rules on state aid, among other things on open access, non-discrimination and fair pricing. FICORA pointed out that some of these rural networks had significantly increased their market share in the relevant areas but considered this to be insufficient grounds to designate them (or some of them) as having SMP. The NRA then repeated that the behaviour of these parties on the market was significantly different from that of the traditional vertically integrated electronic communications companies that normally strove to maximise their profits.

1.2.12 Latvia

58. In the case of Latvia from 2018 the EU Commission endorsed a draft market analysis by the Latvian NRA (SPRK) of markets 3a and 3b.[32] In a prior SPRK market analysis of market 3a in 2013[33], the NRA came to the conclusion that the geographic market was the whole country, despite the fact that competitors of the SMP operator (SIA Lattelkom) had been deploying fibre-optic network in rural areas and that the SIA Lattelkom market share was much lower within Riga than outside. SPRK came to the same conclusion in 2018 despite the fact that this development had continued, as the difference in competitive pressure that was identified was not considered sufficient to justify segmented geographic markets. The same conclusion was reached for market 3b. The EU Commission urged SPRK to consider applying differentiated obligations by geographic area.[34]

1.2.13 Belgium

59. In the case of Belgium from 2018 the EU Commission endorsed a draft market analysis by the Belgium NRA (CRC) of markets 3a and 3b. CRC planned both to segment geographic

[32] See LV/2018/2097 and LV/2018/2098.
[33] See LV/2013/1487.
[34] In an EU Commission Opinion, the following is said, among other things about SPRK geographic analysis: *"The Commission notes that in Latvia, and in particular in its capital Riga, which accounts for more than one third of Latvia's population, alternative operators have invested in the roll-out of their own network infrastructure, and are, therefore, able to provide retail services without any reliance on the availability of regulated wholesale access products. In this regard, the Commission noted that alternative operators currently provide slightly more than […] % of retail broadband services in Riga, and according to SPRK the network of the SMP operator is already duplicated to a significant extent. On the other hand, SPRK does not possess exact information as to the topology of alternative networks, and the presence of alternative networks can be different from street to street. In this respect the Commission recalls that* ***while such differences may not necessarily justify the definition of separate relevant markets,*** *the Commission would like to point out again* <u>*that such divergent competitive conditions between different areas (within the same geographically defined market)*</u> ***can be addressed by imposing geographically differentiated remedies.*** *The Commission, therefore, asks SPRK to reassess in more detail the availability of alternative (physical) networks, their topology and the level of duplication to reconsider the possibility to impose a lighter set of remedies in the region (s) where the competitive pressure through such networks are higher."* (PTA emphases edit)

markets and to apply, differentiated obligations on the markets in question.[35] With respect to copper and fibre, the CRC applied various obligations on the SMP operator (Proximus) according to the number of NGN on both markets 3a and 3b. Lighter obligations were imposed on the company in those areas where there were three or more electronic communications companies operating NGN that had more than 50% deployment.[36] With respect to cable systems, the CRC segmented market 3b geographically according to the area of deployment of the three cable systems used there.[37] It is interesting that CRC imposes obligations on the cable operators in question, though there are not former incumbent monopolists in electronic communications in that country.[38]

1.2.14 Norway

60. In the case of Norway from December 2018 the EFTA Surveillance Authority (ESA) raised no objections to the conclusion of the Norwegian NRA (NKOM) to decide geographic markets on markets 3a and 3b as being the whole country, to designate Telenor as a company with SMP on both markets and not to apply differentiated geographic obligations on these markets.[39] In the opinion of NKOM, the retail market for standard broadband access consisted of all access technology through a fixed line network, i.e., copper, fibre-optic, cable systems or fixed wireless access networks, but not mobile networks. The same applied to the wholesale market 3b. Wholesale market 3a on the other hand, consisted only of service over copper and fibre-optic networks.

61. The deployment of fibre-optic networks in Norway, was for a long time mostly in the hands of parties other than Telenor, first and foremost local networks owned by municipalities and/or energy companies.[40] For some considerable time, Telenor emphasised the upgrading of both its copper systems and cable systems. Telenor, however, has recently been decommissioning parts of its copper system quite rapidly, and it has in addition, commenced deployment of its own fibre-optic system. When the analysis in question was made, there was thus competition in these three systems in Norway. Most connections were fibre-optic, next

[35] See BE/2018/2073 and 2074.

[36] It is worth noting that the CRC plans not to impose any obligations on NGN infrastructure during the 5 years subsequent to the decision, except for access to conduits and ducts and for transparency with respect to planned deployment of such networks. Then the CRC will assess in each individual instance whether requests for access from parties who have their own infrastructure to the infrastructure of a third-party, constitute fair and normal access requests.

[37] See also the case of Belgium from 2013, BE/2013/1474, which deals with leased lines in retail. In that case, CRC withdrew the margin squeeze test obligation from the SMP operator in areas where at least two fibre-optic networks had been deployed by parties other than the SMP company. There were thus three independent networks on offer in those areas. This Decision constitutes elaboration of a precisely defined obligation which varied between areas, while on the other hand, the country had been defined as a single geographic market.

[38] More specifically, CRC had analysed market 3b as two service markets, i.e., M3b-1 (copper and fibre) and M3b-2 (cable). The Commission expressed doubts about this and considered that it would have been proper to have rather analysed a single service market on market 3b, as there was substitutability between them, than rather consider joint market dominance. In its analysis, CRC had examined joint dominance and had come to the preliminary conclusion that such joint dominance probably existed. The Commission did not however exercise its veto on this issue.

[39] See case number 82766 at ESA, dated 3 December 2018. NKOM’s final decision in the case was made on 20 December 2018. This decision replaced the NKOM analysis of the markets in question from 2014, see case ESA number 74613.

[40] Many of them subsequently set up the association called Altibox.

most were on cable systems and copper connections were in last place.[41] NKOM noted that corporate connections had decreased steadily during the past years, but that it was not certain that this would continue to happen at the same pace during the lifetime of the analysis. In mid-2018, VDSL connections were 35% of xDSL connections in Norway. For this reason, there was leeway for upgrading Telenor copper systems, and thus for increased competition between technologies, even in geographic areas where high speed networks of Telenor competitors were in place or being launched.

62. As stated above, NKOM came to the conclusion that the geographic market for the above specified markets 3a and 3b was the whole country. The NKOM analysis showed no clear distinction between competitive conditions on retail markets by area in Norway, such that it would have been deemed necessary to delineate geographic markets on the wholesale markets in question.[42] Although prices varied to some extent between areas, it was not possible to identify a distinct trend towards prices being higher where competition was less. Among other things, Telenor had not changed its wholesale pricing since January 2014 and this company's prices were the same across the whole of Norway (both in copper and fibre).[43] The same could be said about product offer by area, but it was generally not less in areas with less competition. NKOM furthermore considered there to be no need to conduct a very detailed geographic analysis to come to the conclusion that the country was still a single geographic market on the wholesale markets in question. The analysis that was however made was based on examining the deployment of the various fixed line networks and on examining competitive conditions on retail market.[44]

[41] Statistics from 2017 e.g., shows that xDSL connections reached 94% of the country's population (of which there were VDSL connections that reached 60% of the population), that connections through cable systems reached 49% of the population and FTTH fibre-optic connections reached 59%, and that there was steady annual growth in the number of FTTH connections. 83% of Norwegian households can access high-speed connections through fibre-optic or cable systems. This number increases to 89% if VDSL is added. In 2018, 47% of households in Norway could choose between 30 Mb/s connections from at least two network operators and 25% could choose from three operators. The proportion is 99.9% for 4 Mb/s. Options for consumers in Norway have been increasing in this respect in recent years. The situation is however not as good for 50 or 100 Mb/s connections or greater. In Norway there are 130 service providers operating on the retail market for broadband connections through fixed line network to households, of which 6 are operating across the whole country. Almost all municipalities in Norway (99%) have more than two service providers (only four have two service providers, and there is no municipality with only one. 97% of municipalities have at least four service providers. The average number of service providers in municipalities is six. Of the above specified 130+ service providers in Norway, 79 of them are the largest service provider in at least one municipality. Telenor was the largest provider in 208 municipalities of a total of 350. The average market share of the largest service provider in the municipality was 58%, but in individual municipalities this fluctuated between 25-98%.

[42] See page 79 in Appendix 1 to the NKOM decision from 20 December 2018: *"There are no large, clearly defined, geographical areas that stand out from the rest of the country in terms of degree of homogeneity in the competitive conditions at an overarching level. In the following, we will analyse whether there are nevertheless any geographical differences in terms of different providers' networks/coverage, market shares, prices and product offerings that indicate that it is necessary to define different relevant geographical markets for broadband access."*

[43] It was furthermore stated in the NKOM analysis (page 98 in Appendix 1) that the NKOM analysis provided indications of possible competition on the retail market for broadband through mobile phone networks, that the possible upgrade of the Telenor copper system and increased Telenor deployment of fibre-optic networks seem to have a constraining impact on pricing by local fibre-optic operators that operated in areas characterised by less competition. There had been price decreases on those networks in recent months.

[44] In national consultation on the above specified market analysis, Telenor expressed doubts about the NKOM conclusions with respect to the geographic market. The NKOM reply on page 16 in Appendix 2 to the NKOM decision from 20 December 2018 states among other things: *"NKOM disagrees with Telenor's claim that NKOM has concluded that there are no geographical differences in prices or product offerings for different speeds.*

63. NKOM furthermore stated that rollout of high-speed networks was going full speed ahead in Norway[45], among other things with the support of the Norwegian authorities. It was important that geographic markets were not defined or delineated that did not take this fact into account and the momentum created by such roll-out. In order to achieve government roll-out objectives, NKOM obligations needed to create an incentive for continued rollout of high-speed networks. In the opinion of NKOM, segmentation of geographic markets into more than one market would not necessarily create such an incentive.

64. Telenor was designated as a company with SMP on both of the above specified wholesale markets. On market 3a, Telenor had 53% market share at a national level and almost 100% in external sales. The next largest operator had 16% market share. Despite the fact that the Telenor market share had declined somewhat between analyses, it was NKOM's opinion that during the lifetime of the new analysis, Telenor would be able to maintain a market share of over 50% because of the company's emphasis on fibre-optic rollout and because the company could upgrade copper in specific areas. On market 3b Telenor had 43% market share at a national level and almost 100% in external sales. The next largest operator had 17% market share. Despite the fact that the Telenor market share had declined somewhat between analyses, it was NKOM's opinion that during the lifetime of the new analysis, Telenor would be able to maintain a market share of over 40% for the same reasons named above regarding market 3a.

65. As previously stated, ESA raised no objections to the NKOM definition of service markets, geographic markets and the designation of parties with significant market power. ESA did however direct the recommendation to NKOM to carefully monitor potential changes to the competitive position on the wholesale markets in question, because of increased fibre-optic deployment by the various players and the diminishing emphasis placed by Telenor on investments in copper networks. This included monitoring all changes to consumer needs and competition momentum, among other things in specific areas, so that in the next analysis it would be possible to assess whether there was still substitutability between service over copper and over fibre-optic network, or whether obligations needed to be adapted.

1.2.15 United Kingdom

66. In December 2018 the EU Commission endorsed a draft market analysis by the UK NRA (OFCOM) of market 3a.[46] The older OFCOM analysis of the market in question was from 2014 and there were no geographic measures applied then, other than those of defining the geographic market in the UK without Hull on the one hand, and defining Hull as a market

NKOM has assessed whether there are distinct differences in prices and product offerings between areas with limited competition, compared with areas with a greater degree of competition, since in such case this will weigh in favour of defining different various geographical markets on the basis of different degrees of competition. This assessment is based on analysis of the price and product offerings of selected broadband providers that represent various business models and access technologies, and which constitute a mix of national, regional and local providers. In this analysis, NKOM has included a certain number of providers that operate in areas where there is reason to assume that competition is limited, in order to compare the prices and offerings of these operators with the prices and offerings of operators that also operate in areas exposed to greater competition. Based on this analysis, ***NKOM has concluded that there is no clear pattern in terms of local and regional providers in areas with assumed limited competition operating with significantly higher prices than national providers that also offer broadband access in areas subject to greater competition.****"* (PTA emphases edit)

[45] Objective of 90% deployment of 100 Mb/s or more in 2020.

[46] See UK/2018/2062 and 2063.

on the other hand, (0.7% of population) for historical reasons, as previously stated.[47] BT was designated as having SMP on the former market and KCOM on the latter.

67. In the new OFCOM analysis from 2018, no changes were made to the geographic approach from 2014. It was stated that OFCOM had considered further geographic segmentation of markets but decided not to as the NRA considered competitive conditions to be sufficiently homogeneous to justify the United Kingdom with the exception of Hull being one geographic market. OFCOM justified its conclusion in the following manner:

- BT pricing policy was the same across the whole country.[48]
- The fact that the BT market share is high and is likely to increase in the lifetime of the analysis (even in cable areas)[49]
- Shortage of clear boundaries between the BT investment policy in areas where cable systems are in place and in areas where they are not.

68. BT was designated as a company with SMP in the UK with the exception of Hull. It was among other things stated that the BT market share on market 3a was about 80% at national level and generally did not fall below 50% in any area. Barriers to entry to the market in question were furthermore high.

69. The EU Commission raised no objections to the above OFCOM draft market analysis.

70. 19 July 2018, the EU Commission endorsed the OFCOM draft market analysis of market 3b.[50] Prior market analysis from 2014.[51] OFCOM segmented three geographic markets in that analysis:

- Hull area
- Market A: BT telephone exchange area outside Hull where only one principal operator[52] apart from BT is operating or would be likely to operate.
- Market B: BT telephone exchange area outside Hull where only one principal operator apart from BT is operating or would be likely to operate (approximately 90% of households in the UK).

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[47] See UK/2014/1606.
[48] On page 6 in the Commission opinion, it said: *"The observed local variations in retail pricing appear to be due to relatively intense competition, in particular through the presence of LLU competitors, and not the presence of a single competitor or the parallel presence of cable infrastructure. In Ofcom´s view, such variations would be unlikely in a modified greenfield scenario, i.e., in the absence of WLA regulation."*
[49] Then it is stated on page 6: *"According to Ofcom´s analysis, current trends suggest that, even as regards fibre/cable connections in cable areas, BT´s service share is likely to increase to around 50% in 2020/2021."*
[50] See UK/2018/2096.
[51] See UK/2014/1608.
[52] On page 3 in an EU Commission Opinion. The following was stated with respect to 'principal operator': *"As in previous reviews, Ofcom considers that the key factor determining differences in competitive conditions between exchange areas (the building block for its geographic markets) is the number of POs able to serve premises within the exchange area. A PO is defined as an operator which Ofcom considers large enough to impose a material competitive constraint on the other operators, across the UK, such as BT, Virgin Media, Vodafone, TalkTalk and Sky. Telecoms providers without these characteristics are far less likely to offer a significant competitive constraint, in Ofcom´s view."*

71. In the above specified OFCOM decision from 2018, the NRA maintained the division of the geographic market into three with small amendments:

- Hull area
- Market A: Areas within the UK with the exception of Hull, where only two parties, including BT provide bitstream service (limited or no competitive infrastructure - approximately 1% of households)
- Market B: Areas within the UK with the exception of Hull where 2 or more principal operators including BT provide themselves or other electronic communications companies with bitstream service (adequate competitive infrastructure in the opinion of OFCOM - approximately 99% of households[53].

72. It was the OFCOM conclusion that the number of principal operators in copper, fibre and cable systems was a key part of assessment of competitive conditions in BT exchange areas. Furthermore, that competitive conditions were likely to be significantly different between these two markets.

73. OFCOM came to the conclusion that no electronic communications company had SMP on Market B[54], but that BT had such a position on Market A. When assessing BT SMP on Market A, OFCOM considered the following:

- Significantly high BT market share (over 90%)
- Projections on limited deployment of LLU and lack of predictability with respect to further fibre-optic rollout.
- Limitation of countervailing buying power.
- Indications on pricing and profitability.[55]

74. The EU Commission understood why OFCOM continued to regulate Market A but indicated to the NRA that it should have in mind whether this would be needed in the future if the share of this market of the whole should further decline.

75. On 21 June 2019 the EU Commission endorsed the OFCOM draft market analysis for the market for physical infrastructure and leased lines, including terminating segments of leased lines.[56] The market for physical infrastructure had not previously been analysed in the

[53] On page 4 in the Commission opinion, it states: *"For the geographic delineation of Markets A and B in the UK excluding Hull area, Ofcom used BT´s local exchange areas as the geographic unit of its analysis. It started by counting POs that have a presence in that exchange area using local unbundling (LLU) over the copper line. It then considered the cable network as present in these areas if it is able to supply more than **65%** of the premises and considered the other POs (Sky, TalkTalk and Vodafone) as present using regulated access to fibre to the cabinet (FTTC) if it is available to more than **65%** of the premises in a copper exchange area. Ofcom also accounted for future entry based on the POs committed plans."* (PTA emphases edit)

[54] On page 5 in the Commission opinion, it states: *„Given the significant amount of entry that has occurred across Market B exchanges and the success of the POs using LLU and VULA, as well as POs using their own local access networks (such as Virgin Media) in securing market share, Ofcom concluded that no provider has SMP in Market B."*

[55] The following is stated in the Commission opinion: *Ofcom finds that the retail pricing evidence is consistent with the different competitive conditions observed between Market A and Market B. For example, **BT´s brand Plusnet has historically charged higher prices in Market A areas.**"* (PTA emphases edit)

[56] See UK/2019/2170 and 2171.

UK, but OFCOM had up to that point in time, rather imposed obligations on BT conduits, ducts and masts on market 3a. OFCOM considered that the EU Broadband Cost Reduction Recommendation did not suffice on its own to solve the competition problem identified on the market in question for physical infrastructure. The main BT arguments for analysing the market in question were to endeavour to create a basis for increased roll-out of fibre-optic networks and more competitive infrastructure in the UK than had been in place. Rollout of FTTH networks had for example lagged well behind in that country and competition in electronic communications had first and foremost been in the form of service competition, largely on the BT copper system.

76. OFCOM planned to segregate geographical markets on the above specified market for physical infrastructure. The NRA used postcodes in this instance. Postcodes where homogeneous competitive conditions were prevalent, were categorised together in geographic markets. The geographic analysis emphasised the existence of infrastructure of BT competitors[57]. BT planned to segment four geographic markets:

- Area where BT is the only operator with infrastructure (BT only areas).
- Areas where one BT competitor has infrastructure in addition to BT (BT +1), excluding HNR areas.
- Areas where at least two BT competitors have infrastructure and are called "High Network Reach Areas (HNR), excluding Central London (CLA)[58].
- Central London Area - CLA - Areas in London where a large number of BT competitors have infrastructure that can be used as leased lines.

77. An area where BT is the only operator with infrastructure that covers 60% of postcodes, 53% of households and 56% of large business sites. An area where one competitor of BT has infrastructure that covers 34% of postcodes, 45% of households and 37% of large business sites. HNR and CLA areas each cover more than 3% of postcodes, 1% of households, and 3% of large business sites.

78. OFCOM designated BT as having SMP on all the above specified areas on the market for physical infrastructure and imposed the same obligations on BT in all areas.[59] Here it is remarkable that OFCOM segments geographic markets but comes to the conclusion that BT has SMP on all the four markets and then imposes precisely the same obligations everywhere.

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[57] On page 4 in the Commission opinion, it states among other things: *„Ofcom assumes that BT is present in each geographical unit and covers all premises (expect for the Hull Area). Alternative operators are considered to be present, if;* ***a) in relation to broadband coverage the operators serve more than 65% of premises in that postcode sector on the basis of its own infrastructure;*** *and b) in relation to leased lines coverage, the operator can serve its services within 50 meters of more than 65% of large business and mobile sites in that postcode sector."* (PTA emphases edit)

[58] On page 4 in the EU Commission opinion, it states that it is only assumed that the cable operator Virgin Media will become such a HNR operator during the lifetime of the analysis. It is furthermore stated: *"HNR areas are defined as aggregated postcode sectors that have at least two alternative (non-BT) telecoms infrastructures that can serve within 50 m more than 65% of large business and mobile sites and Virgin Media passing more than 65% of premises."*

[59] On page 11 in the Commission opinion, it states: *"Ofcom explains that while its analysis suggests that there are potential variations in the competitive conditions between each PIA market sufficient to define separate geographical markets,* ***the remedy imposed are the same in each market as everywhere BT has the ability to possibly abuse its SMP position."*** (PTA emphases edit)

79. The Commission expressed doubts about the above specified geographic delineation of the market for physical infrastructure and considered that competitive conditions did not seem to vary greatly between areas. It would therefore have been more appropriate to come to the conclusion that the geographic market should be the whole country with the exception of Hull. Coming to a conclusion on segmented geographic markets where the same competition problems are identified across the whole country, could cause uncertainty about continuing regulation at a national level and thus discourage potential requesters of access from trusting the regulation in question. The Commission did however not exercise its veto as this would not have changed the conclusion, as BT had SMP in all areas (except Hull) and the same obligations in all areas.

80. The previous market analysis on the market for termination of leased lines was from 2016.[60] OFCOM segmented four geographic markets in that analysis:

- Central London Area (CLA)
- London Periphery (LP)
- The rest of the UK excluding Hull
- Hull

81. In the OFCOM market analysis from 2019 on the leased line market in question, the NRA made a distinction between two service markets, i.e., the market for traditional low bandwidth leased lines (Traditional Interface (TI)) and the market for new types of leased lines (Contemporary Interface (CI)). The latter mentioned market is then divided into CI Access Services[61] and CI inter-exchange Connectivity Services.[62] The geographic market for traditional leased lines was the whole country. On the other hand, OFCOM plans to apply geographic segmentation on the market for the other new types of leased lines.

82. On the market for CI Access services, OFCOM identified a difference in competitive conditions between areas. The NRA considered the existence of BT infrastructure competitors to be a key issue with respect to such a difference. OFCOM based this on the existence of BT infrastructure competitors within 50 m distance (buffer distance) from the purchaser and on 65% deployment. OFCOM then calculated deployment of BT infrastructure competitors to large business areas and to mobile phone transmitters within each post called in the UK. Those postcodes that contained a comparable number of BT infrastructure competitors were subsequently categorised as such. OFCOM segmented 6 geographic markets in this manner:

- Area where BT is the only operator (BT only) - approximately 60% of postcodes.
- BT+1 – approximately 35% of postcodes.
- Central London Area - CLA - on average 4.3 BT infrastructure competitors there.
- High Network Reach areas of Birmingham, Bristol, Edinburgh, Glasgow, Leeds and Manchester (Metro areas).

[60] See UK/2016/1849.
[61] They are: *"Connections to end-user business sites such as office buildings and mobile base stations."*
[62] They are: *"Connections between BT exchanges in different geographical areas such as between towns and cities"*

- All other High Network Reach Areas.
- Hull

83. On the CI inter-exchange market, OFCOM came to the conclusion that each BT telephone exchange was a separate geographic market.[63]

84. On CI Access Service Markets, OFCOM designated BT as a company with SMP across the whole UK except in the Central London Area and Hull. On the CI inter-exchange Connectivity Service market, OFCOM only designated BT as having SMP in the BT only and BT +1 areas and not on BT +2 or more areas. The same applies to trunk line segments of leased lines.

85. Then OFCOM applied differentiated obligations on the geographic markets for terminating segments of leased lines where BT was designated as having SMP.

86. The EU Commission raised no objections to the above specified geographic measures by OFCOM on the leased line markets. [64] OFCOM made a final decision, in connection with the above specified market analysis on the market for physical infrastructure and leased lines on 28 June 2019 without taking into account the objections of the Commission with respect to geographic analysis.

1.2.16 Greece

87. In the case of Greece from 2019, the EU Commission raised serious doubts about the draft market analysis of the Greek NRA (EETT) for terminating segments of leased lines.[65] EETT subsequently withdrew the draft in question. The Commission objections concerned first and foremost EETT plans to entirely withdraw obligations on the SMP operator (OTE) for leased lines that were larger than 4 Mb/s in two areas, i.e., in Athens and in Pireus. These were plans for differentiated geographic obligations and not for separate geographic markets. EETT argued that OTE competitors had deployed networks in these areas and that there, OTE market share had dropped to 48% on the retail market against 81% at a national level.[66] The Commission noted that EETT had referred to deployment of OTE´s competitors´ networks in the areas in question without the draft market analysis in question having constituted any material assessment of the networks in question, including information on network topology, more precise deployment of these networks in the areas in question etc. For this reason, EETT could not assess the capability of the competitors in question to apply competitive pressure on

[63] On page 6 in the Commission opinion, it states: *"Ofcom conducts an analysis of competitive conditions at each BT exchange, as these are handover points for access remedies whether for residential products or for business products."*
[64] On page 14 it states: *"Ofcom further concludes that differentiated remedies for different geographical markets are justified in downstream markets such as the high-quality access market and **expects this to be the case in future market reviews of downstream markets.** The competitive conditions as regards the high-quality access market appear indeed substantially different across geographical markets."* (PTA emphases edit)
[65] See EL/2019/2190.
[66] On page 12 in the Commission opinion, it states: *"In the current draft measure, the data provided by EETT still show a very strong market position of OTE that is very stable over time both in the entirety of Greece and – although to a lesser extend – in Athens/Pireus."*

OTE.[67] It was then stated by the Commission that regardless of the above, it would probably have been more appropriate to lift price control on the connections in question as a first step, instead of withdrawing all obligations related to these connections.[68]

1.2.17 Germany

88. In December 2018 the EU Commission endorsed a draft market analysis by the German NRA (BnetzA) of market 3a.[69] It was stated in the last BNetzA analysis of the market in question in 2015[70] that the geographic market had been decided as the whole country and that this was still the conclusion. In the new draft market analysis, the NRA conducted a rather detailed analysis of the geographic market and segmented areas into four units based on level of competition. The BnetzA conclusion subsequent to this analysis was nevertheless that the geographic market was the whole country and nor did the NRA embark on deciding differentiated obligations by geographic area. The areas that the NRA examined were:

- Area 1: Only network of (Deutsche Telecom – DT).
- Area 2: DT and at least one competitor that is not a cable operator and has more than 10% deployment.
- Area 3: DT and at least one competitor that is a cable operator and has more than 10% deployment.
- Area 4: DT and at least one competitor that is not a cable operator and has more than 10% deployment and at least one competitor that is a cable operator and has at least 10% deployment.

89. BnetzA gathered information about average DT market share within each area and came to the conclusion that the geographic market should not be segmented. The EU Commission raised significant doubts about the BnetzA geographic analysis but did not

[67] The following is stated on page 12 in the Commission opinion: *"Moreover, the analysis regarding the different competitive conditions raises serious doubts in particular because* ***it lacks detailed data on the presence of alternative networks, their coverage and ultimately the alternative operators´ ability to constrain the market power of OTE*** *in this area. <u>Without such data</u>, and in the light of the still very strong market position of OTE, <u>it cannot be ensured that the intended withdrawal of access or indeed any major lessening of regulation would not be detrimental to competition</u> and* ***would not lead to a distortion of competition in favour of the incumbent operator."*** (PTA emphases edit)

[68] The following is stated on pages 10-11 in the Commission Opinion: *"The Commission considers that in situations when NRAs cannot clearly identify substantially and objectively different conditions which are sufficiently stable over time in order to define distinct wholesale geographic sub-national markets,* ***the existence of geographically differentiated constraints on an SMP operator should be taken into account at the remedies stage*** *by imposing a geographically differentiated set of obligations. The appropriate criteria to be taken into account when assessing the homogeneity of competitive conditions in different geographic areas may vary depending on the market (s) in question but are based on the same competition law principles to be applied for any geographic market delineation of markets and/or remedies. Therefore, based on the existing regulatory practice, the following indicators should be taken into account:* ***(i)*** *the number and importance of potential competitors including their geographical presence;* ***(ii)*** *the coverage of alternative networks;* ***(iii)*** *the distribution of market shares; and* ***(iv)*** *price differences or variations in prices across geographies, if any. Other parameters could also be taken into account such as the availability of access to passive infrastructure which could facilitate network rollout."* (PTA emphases edit)

[69] See DE/2019/2200.

[70] See DE/2015/1791.

exercise its veto.[71] Among other things, the Commission pointed out how varied the DT market share and deployment of DT competitor networks were within the four areas and that this was only published as averages in each individual area. Furthermore, a breakdown of deployment statistics for competitor networks was not published. The Commission furthermore considered that 10% deployment within an area was too small to be able to assess whether it would exert competitive pressure on DT, without a closer inspection of indications of potentially varied competitive conditions in the areas. It was also stated by the Commission that within Area 4 there were several urban areas where at least two of DT competitors had 50-100% deployment and where the DT market share had fallen beneath a specific level, which was not published because of confidentiality. The methodology used by BnetzA was therefore, in the view of the Commission, not sufficiently precise and detailed to identify real varied competitive conditions between the differing municipalities. On the basis of data that was however available, the Commission agreed with BnetzA that a detailed geographic analysis would in all likelihood not change the NRA's conclusion to the effect that the time had not come to segregate geographic markets. The Commission referred among other things to the fact that there were no indications of varying retail pricing between areas. The Commission urged the NRA to consider differentiated geographic obligations.[72]

90. In the case of Germany from 2015[73], the German NRA (BNetzA) did however apply geographic measures on market 3b. The service market was split in two, i.e., "layer 2" (ATM or Ethernet that can be connected at 899 locations and "layer 3" (IP which can be connected at

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[71] The following discussion appears in the EU Commission Opinion:

„When delineating the exact geographical boundaries of a relevant market, ***NRAs should take into account the scope of the potential SMP operator´s network and whether the potential SMP operator acts uniformly across its network area or whether it faces appreciably different conditions of competition to such a degree that its activities are constrained in some areas but not in others,*** *see BEREC Report on the application of the Common Position on geographic aspects of market analysis, BoR (18) 213, and more recently cases PL/2019/2160 and LT/2019/2183.*

The presence of alternative infrastructures *(e.g., cable, high-speed fibre networks, and/or in some circumstances even wireless networks),* ***in some geographic areas, is likely to exert competitive pressure on the former incumbent operator.*** *As experienced in many Member States, the increasing investment in alternative infrastructures is often uneven across the territory. In many countries, as it is observed in Germany, there are now competing infrastructures only in parts of the country, typically not exclusively in urban areas, and therefore the intensity of such competitive pressure varies across the territory of Germany.*

Therefore, NRAs are expected, when assessing whether conditions of competition within a geographic area are similar or sufficiently homogeneous, to provide <u>structural</u> and <u>behavioural</u> evidence. In a number of relevant decisions of other NRAs (see BEREC Report on the application of the Common Position on geographic aspects of market analysis, BoR (18) 213, and more recently cases PL/2019/2160 and LT/2019/2183) ***the geographic delineation of markets is based on a certain number of indicators,*** *such as the number of operators present in a given geographic unit, their ability to exert a sufficient (even indirect) competitive constraint on the SMP operator when reaching a certain significant coverage, and the distribution of market shares. When such areas are defined and grouped according to the homogeneity in terms of competitive conditions,* ***a further analysis of other parameters*** *such as price differences observed in the different areas, the switching behaviour towards non-ubiquitous alternative networks,* ***is usually further investigated in order to verify whether those differences are such to justify the definition of a separate geographic market.****"* (PTA emphases edit)

[72] On page 9 the Commission states: *"Moreover, the Commission observes that, even when geographic differences in competitive dynamics are not found to be sufficiently clear and stable to define separate geographic markets,* ***they should however be taken into account when assessing appropriate and proportionate remedies.***

… Therefore, the Commission urges BnetzA to improve and further substantiate in its final measure the indicators used for the analysis of competitive conditions in each cluster, based on the detailed information submitted in its reply to the Commission´s request for information and in particular with reference to the coverage of alternative networks and evolution and distribution of market shares. ***The Commission calls on BnetzA to consider differentiating remedies on a geographic basis,*** *in order to take into account differences in conditions of competition in the different geographic areas.* (PTA emphases edit)

[73] See DE/2015/1781.

much fewer locations, i.e., 73 which would be reduced to 12 or even one in the future). BNetzA considered that for "layer 2" the market should be the whole country but that "layer 3" should be segmented geographically. The NRA segmented 20 cities from the rest of the country where it was considered that competitive conditions were significantly different. 5.6% of the population of the country lived in these 20 cities. The NRA based geographic analysis on DT telephone exchanges. Criteria to be considered to belong to a competitive area were three, i.e., in the first case that they were more than 4000 access lines, in the second case that the number of competitors of the SMP operator were at least four in the relevant area and finally that DT market share had fallen below 40%.

1.2.18 Italy

91. In the case of Italy from 2019 the EU Commission endorsed a draft market analysis of markets 3a and 3b by the Italian NRA (AGCOM). As stated here above, AGCOM came to the conclusion that Milan was a separate geographic market on the said markets, against the rest of Italy and thus was designated as having effective competition and therefore no electronic communications company was designated as having SMP. Three electronic communications companies operate there that offer their own FTTH network, i.e., the former incumbent monopolist (TIM), and Open Fibre[74], which have over 90% deployment and Fastweb which has about 40% deployment. The TIM market share was also much lower there than elsewhere in Italy. TIM had 48% market share there on market 3a with internal turnover (33% in external turnover), 21% on market 3b and 29% in retail. The Open Fiber market share is higher than that of TIM in the city on markets 3a and 3b, and TIM is there the third largest operator.[75] The TIM market share fell significantly during the years 2017 and 2018 and was now much smaller in Milan than elsewhere in Italy.

92. It was then the conclusion of AGCOM to apply differentiated obligations in 26 municipalities on the markets in question (5% of population)[76]. The conditions that must be fulfilled to be considered a competitive area where lighter obligations will be imposed on TIM (more latitude with respect to prices on market 3a, no price control on market 3b and lighter access obligations) are:

[74] Open Fiber is a wholesale-only operator. The company was founded in 2015 by public bodies, among others, the energy company Enel which owns 50%. The company's FTTH network reached about 12,500 households in Italy in mid-2019 and the company has notified major rollout plans for the coming years.

[75] The following is stated in the Commission Opinion in its discussion on AGCOM intentions:

*"AGCOM observes that since the previous market review in Italy there was **a significant development of alternative infrastructures affecting the competitive situation on the considered markets.** AGCOM carries on an analysis of the competitive conditions on a geographic basis taking into account in particular the number of operators, the number of alternative networks and their coverage as well as the distribution and evolution of market shares over time. AGCOM considers that **in Milan the structural competitive conditions are already significantly and durably different compared to other municipalities** thus affecting the boundaries of the geographical market. ... With the respect to other Italian municipalities (rest of Italy), notwithstanding the comparatively stronger competitive dynamic in some municipalities, in particular where there are <u>several alternative access networks</u>, **AGCOM does not considers such differences sufficient to justify the definition of separate geographical markets. Thus, it proposes to recognise the observed heterogeneity in competitive conditions via the application of differentiated remedies."*** (PTA emphases edit)

[76] The list of companies that fulfil the conditions must be updated annually.

- At least three companies with their own infrastructure[77] who all need to reach 60% of inhabitants and the total coverage of TIM competitors must be at least 75% and
- The TIM market share must be 40% or less by number of connections and
- TIM wholesale service (VULA or bitstream) shall be under 80%.

93. The EU Commission stated in its Opinion that AGCOM had taken into account the existence of competitive conditions that were sufficiently delineated and stable between areas, both with regards to separate geographic markets and to differentiated obligations by geographic area.[78] The Commission also showed that it understood that AGCOM was concerned that deregulation of the markets in question at this point in time, particularly Market 3a, could hinder competition on those markets.[79]

1.2.19 Poland

94. In December 2018 the EU Commission endorsed draft market analyses by the Polish NRA (UKE) of markets 3a and 3b.[80] The final decision was taken by UKE in October 2019. There, the UKE applied geographic measures such that the said markets were geographically segmented. On market 3a competitive market there were 51 municipalities (13% of population, and on market 3b there were 151 municipalities (36% of population). The market share of the SMP operator (OPL) in the above specified 51 municipalities on market 3a was only 14-27%, while the company's share at national level is 64%. In the above specified 151 municipalities on market 3b, the company market share was in the range of 17-38%. For an area to be considered competitive it had to fulfil all of the following criteria:

- At least three electronic communications companies provide retail broadband service.
- OPL has no higher than 40% market share in retail by number of connections.
- At least 65% of households have access to infrastructure from at least three electronic communications companies (on market 3a these need to be separate infrastructures of at least three operators while on market 3b an LLU operator may be one of the three operators).

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[77] In the Commission Opinion, the following is stated in the section that describes the AGCOM intentions: *"AGCOM explains that this indicator has been reinforced compared to what was proposed in the national consultation following the comment received by alternative operators and the National Competition Authority,* ***which underlined the need to have the presence of <u>minimum two alternative networks</u> with a considerable overall coverage*** *in order to assure a significant competitive pressure by alternative operators."* (PTA emphases edit)

[78] The following it is stated in the Commission Opinion: *"Against this background, the Commission would like to stress that* ***the differences in competitive dynamics among the municipalities are based on sufficiently coherent and cogent evidence,*** *and therefore would like to invite AGCOM not to postpone the implementation of flexibility on VULA prices, and in any case not beyond 2021."* (PTA emphases edit)

[79] The following is then stated in the Commission Opinion: *"The Commission also acknowledges that Italy is indeed experiencing an unusual scenario in the wholesale market, where a new entrant is a wholesale-only operator investing at national level.* ***This would require a regulatory approach different from the one used to create a level playing field for alternative operators vertically integrated.*** *In addition, the Italian market is characterised by TIM's very high market shares in Market 3a, significant uncertainty concerning future market developments due to the formal announcement of negotiations between Open Fiber and TIM on possible forms of integrations of their fibre networks as well as ongoing antitrust investigations."* (PTA emphases edit)

[80] See PL/2019/2160 and 2161.

- No more than 10% of households have no access to Internet.

95. The Commission allowed the draft market analyses to continue, but nevertheless expressed doubts about the geographic analysis. The Commission felt that there was among other things, a lack of explanation of why the criteria in question were chosen and how they reflected the varying competitive conditions between areas. For example, could a small change in the 65% criterion in one direction or the other, lead to a large decrease or increase of competitive areas (sensitivity test).[81]

96. In addition to this the methodology was thought to be insufficiently forward-looking. The Commission urged UKE to prescribe in the final decision how future development of networks and other market development in the short-term and mid-term would impact on the list of municipalities in competitive areas. It was likely that municipalities that fulfilled the conditions would increase significantly during the lifetime of the analysis.

97. The Commission finally expressed doubts about the UKE plans to impose obligations on OPL fibre-optic in areas where competition was deemed not to be effective.[82]

98. In the UKE analysis of market 3a in 2010[83] the NRA applied no geographic measures. In 2016, UKE withdrew two draft market analyses of the market in question where geographic measures were planned after the Commission had raised serious doubts about the planned methodology[84]. This related both to the plans for a segmented geographic market and to differentiated obligations.

99. In the case of Poland from 2012[85] UKE had planned to divide the geographic market for central access provided at a fixed location for mass-produced products (market 3b) into two units. UK considered that 20 municipalities of 3076 formed a separate geographical market.

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[81] It was furthermore stated on page 11: *"The Commission considers that if the first criterion (at least three operators providing retail broadband access) were maintained as proposed, then the following thresholds used could be adapted to be less restrictive, while still ensuring the competitive character of the communal area assessed. Indeed,* ***the proposed thresholds*** *(less than 40% market share of OPL, three operators with 65% coverage)* ***appear relatively high and might therefore be overly conservative,*** *i.e., comparing to e.g., the cases from Portugal (PT/2016/1889-1889) and Spain (ES/2015/1818-1820). As a consequence, the cumulative application of the criteria results in OPL having retail market share in the competitive areas in both markets* ***significantly below 20%,*** *while moreover,* ***is only to a very limited extent due to the effect of the current wholesale access regime,*** *given that take-up on both markets 3a and 3b is limited and declining. While the Commission is conscious that it has accepted the same set of criteria used by UKE in its last market review, as regards market 3b, it would urge UKE to give greater weight to the developing experience of NRA´s in terms of geographic segmentation."* (PTA emphases edit)

[82] See discussion on page 12: *" ... The Commission reiterates that NRAs should decide not to impose or maintain regulated wholesale access prices on active NGA wholesale inputs but to impose strict form on non-discrimination on the SMP operator concerning passive and active NGA wholesale inputs and to ensure both technical and economic replicability ... alternative infrastructures are likely to be a relevant constraint for OPL even in the markets where it has SMP. Alternative infrastructures are likely to force OPL to invest to match their network performance. Moreover, OPL likely needs to adapt its retail prices to the prices of regional competitors, especially if, even if those competing networks are fragmented and not present everywhere, OPL applies national retail prices. Therefore,* ***the Commission calls upon UKE to reconsider its position on the need for strict price regulation on fibre*** *... In case UKE should conclude that strict price regulation of fibre may still be needed, the Commission urges UKE to* ***further consider the possibility of differentiating regulatory obligations,*** *<u>allowing pricing flexibility at least in those areas where constraints stemming from alternative infrastructures are more substantial.</u>* (PTA emphases edit)

[83] See PL/2010/1137.

[84] See PL/2016/1909 and 1910.

[85] See PL/2012/1394.

One criterion was that OPL had less than 40% market share in the area in question. The EU Commission had serious doubts as UKE had based its case on obsolete data and had not succeeded in proving alleged differing competitive conditions between areas. The Commission therefore exercised its veto and the geographic segmentation in question was not implemented. UKE conducted a new analysis of the relevant market in 2014 where geographic markets were segmented, and the EU Commission endorsed that analysis.[86]

1.2.20 Lithuania

100. In the case of Lithuania from 2019 the EU Commission endorsed a draft market analysis by the Lithuanian NRA (RRT) of markets 3a and 3b.[87] It was stated that the last analysis made by RRT on the markets in question was from 2015 (market 3a) and 2016 (market 3b) and that no geographic measures were applied then.[88] Telia is the SMP operator in Lithuania.

101. RRT was now conducting analysis of competitive conditions by municipality. On market 3a, the NRA's approach was that municipalities that fulfilled all of the below specified for criteria belong to the same geographic market. The criteria were:

- The criteria specified below need to apply to two of three related retail markets (voice telephony, TV and Internet access):
  - Number of retailers at least three (including Telia) and
  - At least one competitor of Telia has at least 25% market share and
  - Telia market share may generally not exceed 40% but should this happen, the next competitor may not have more than 15 percentage points below Telia.
- Fixed electronic communications networks of at least two competitors of Telia, where each shall reach at least 50% of households in the municipality in question.[89]
- At least 70% of households in the municipality shall have the option of access to networks of three operators.[90]
- No more than 40% all households in the municipality are served by Telia competitors that have access to Telia conduits and ducts.

[86] See PL/2014/1632. There are 76 municipalities (24% of population) categorised as competitive markets. The criteria were: 1) OPL has no more than 40% market share. 2) At least three electronic communications companies provide retail broadband service. 3) At least 65% of inhabitants had access to infrastructure from **at least three electronic communications companies** (including LLU). 4) No more than 10% of households have no access to Internet. These competitive areas had the common characteristic of having powerful competition from cable operators. The Commission allowed the market analysis to pass through but urged UKE to provide more compelling arguments in the final decision for operators who leased local loops (LLU operators) being able to provide real competition on the retail market to OPL and cable operators.

[87] See LT/2019/2183 and 2184.

[88] See LT/2018/1821 and LT/2016/1839. The EU Commission then criticised that RRT had not made a more detailed geographic analysis of competitive conditions than was the case, but the Commission did not exercise its veto.

[89] In the EU Commission Opinion, where the criteria are discussed, it is stated: *"According to RRT, the network deployment of the alternative operators shall be at least two times higher than the minimum permitted market share for the strongest alternative operator (25%) so that the operator is able to effectively compete and to connect new end-users without incurring significant costs."*

[90] The following is stated about this criterion: *"According to RRT's response to the third RFI, the third criterion is established so that the relevant operator has the potential to expand and to compete for end-users, and the end-user is in a position to choose among several operators for the provision of retail services."*

102. The conclusion was that none of the 60 municipalities in Lithuania fulfilled all these criteria on market 3a. For this reason, the NRA defined the geographic market as the whole country.

103. The same criteria were used as a basis on market 3b, with the exception of the fourth (Telia conduits and ducts). The conclusion there was that two municipalities fulfilled the criteria (4.2% of population) and the NRA therefore segmented geographic markets and they became two. In Area 1 (no competition), Telia had 58% market share, the next operator had 22% and many others had 7% market share or less on the market in question. Telia had 51% market share in this area in the retail market for Internet access. In Area 2 (competition), Telia market share in wholesale was 38%, while its competitors had a similar share. RRT considered that in this area Telia could not influence related retail markets if obligations were in place by simply controlling the conditions for central access provided at a fixed location for mass-produced products in wholesale. It was then stated that although the entry barriers in this area were substantial, there were at least two Telia competitors able to provide such wholesale access. RRT considered that there was effective competition in Area 2 and designated no operator as having SMP in that area and therefore withdrew obligations from Telia.

104. The EU Commission criticised RRT for applying criteria that were too strict. The Commission said that the combined application of the three criteria (i.e. market share in retail, network coverage and consumer options when choosing a retail company) led to the conclusion that only two of sixty municipalities on market 3b fulfilled the criteria.[91] In the opinion of the EU Commission, the RRT narrow approach limited the possibility of further deregulation that could take place in more municipalities if the criteria were not as strict as was the case, particularly when one had in mind the fact that RRT maintained that there was competitive infrastructure in Lithuania.

105. With respect to the fourth criterion on market 3a (conduits and ducts), the EU Commission believed this belonged rather in market analysis of the market for physical infrastructure, which was an upstream market in relation to market 3a, i.e., higher in the value chain. In the opinion of the Commission, this criterion led to an approach that was overly strict in geographic definition of market 3a. Another option for RRT would have been to rather consider differentiated geographic obligations instead of using such stringent criteria for geographic segmentation of the market.

[91] In an EU Commission opinion, the following is stated: *"The Commission welcomes RRT's granular approach in the analysis of the geographical dimension of the wholesale local and central access markets. The Commission notes that RRT bases such analyses on the cumulative fulfilment per municipality of a set of three criteria* ***(retail market shares, network coverage and end-user's choice of retail providers)*** *identical for market 3a and 3b, and an additional criterion applicable for market 3a only that assesses the dependency of alternative operators on the incumbent's ducts. The Commission notes however, that RRT's approach towards the geographic market definition appears too restrictive. The Commission considers that given the requirement in the first criterion of having at least three operators providing retail services in a given municipality, the #reminder criteria as a whole could become laxer, while still ensuring a competitive environment in the area assessed. The Commission in particular notes that while a parameter* ***taking into account <u>the aggregate coverage of the two alternative networks appears to be appropriate</u>*** *in order to safeguard a certain level of coverage, in cases where the two alternative networks would overlap, the coverage criterion that requires that at least 70% og the residences in a given municipality are served by a minimum of three operators appears to be overly conservative. This is particularly the case when compared to the criteria of delineating geographic markets between non-competitive and competitive areas used by other NRAs in comparable situations, particularly having in mind the vibrant infrastructure competition in significant parts of those countries –* ***a circumstance which seems broadly comparable to Lithuanian,*** *for example PT/2016/1888-1889, ES/2015/1818-1820 and IT/2019/2181-2182."* (PTA emphases edit)

106. The EU Commission also considered that the RRT geographic approach to be not sufficiently forward-looking, among other things with respect to planned deployment of networks. There was furthermore no review procedure included in the analysis, which would have made it possible for RRT to withdraw obligations in municipalities that could fulfil the criteria after a final decision was made, without having to repeat a complete market analysis.[92]

107. On 19 July 2019, 4 days after the above specified EU Commission opinion was presented, RRT made a final decision with respect to market analysis of the said markets. RRT did not change criteria or any other or its approaches to geographic analysis of the markets in question.

1.2.21 Holland

108. In the case of Holland from 2018-2019, the EU Commission endorsed the draft market analysis by the Dutch NRA (ACM) of markets 3a and 3b, where an operator other than the former incumbent was designated as an electronic communications company with SMP on both of these markets (VodafoneZiggo).[93] KPN operates copper and fibre-optic networks with national coverage while VodafoneZiggo operates a cable system, which also has almost national coverage. This was joint dominance with the former incumbent (KPN).

109. There were no geographic measures in this case and the geographic market was therefore decided as the whole country. The retail market was defined as broadband service with the addition of voice telephony in a fixed line network and TV service bundled with such broadband service, over copper, fibre and cable systems. Neither KPM nor VodafoneZiggo were considered to have single dominance, but they both had 48-45% retail market share. ACM came to the conclusion that without wholesale obligations on the relevant market, there would be a danger of joint dominance by the companies on the retail market. Among other things, there was considered to be a danger that KPN would cease to offer access to its copper and fibre-optic networks if the obligations were lifted, or only provide access at unattractive terms and that VodafoneZiggo would not begin to offer wholesale access on their own initiative.

110. On 17 March 20, the highest Administrative Court in Holland revoked the above specified decision where the issue of contention related to joint dominance of KPN and VodafoneZiggo. The Court held that ACM had failed to justify the designation of the parties in question by joint market dominance. However, the Court did not provide guidance on how

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[92] The following is stated in the Commission case on pages 12-13: *"Against this background, the Commission urges RRT to adopt in its final measure a* ***more flexible approach towards the definition of geographic markets and review the fulfilment of the criteria on regular (annual) basis.*** *The Commission also encourages RRT to consider further adaptation of the chosen criteria and revise the necessity of keeping all the criteria that were chosen, in particular as regards the coverage criteria and the ducts accessibility criteria and adjust its findings as regards the scope of the defined geographic markets. Moreover, the Commission invites RRT to consider, at the occasion of the next market review, whether it is necessary to define a separate physical infrastructure market and* ***whether it is necessary to further adapt the criteria for geographic market delineation of wholesale local and central access provided at fixed location,*** *<u>with a view to adjust the reach of the competitive area to the relevant market developments</u>."*

[93] See NL/2018/2099 and NL/2018/2100. Markets 3a and 3b were actually defined as the same market in this analysis. The Commission referred to the fact that the recommendation on relevant markets from 2014 allowed for the possibility of taking this route. The Commission endorsed the ACM arrangement for defining the service market but urged ACM to provide further arguments for the assessment of substitutability between the markets in question. It is worthy of note that in Holland the situation is that virtual access, e.g., VULA is commonly used instead of physical access.

ACM should have carried out its analysis. The solution is final, and it is not clear how ACM will respond. ACM had based its conclusion on the criteria set out in European competition law precedents, which are that companies in such a dual position have incentives and capacity for concerted action and the opportunity to maintain them.

1.2.22 Sweden

111. In a recent case in Sweden from 2019-2020, the EU Commission raised serious doubts about the Swedish NRA (PTS) draft market analysis of market 3a with respect to geographic analysis of the market for fibre-optic.[94] PTS must therefore conduct a new geographic analysis of the market in question and on completion, send the draft of a new market analysis to the Commission. For the time being, the NRA's older market analysis from 2015 applies on the market in question.

112. No reservations were however made on the PTS analysis of market 3b[95], where, as in the previous PTS analysis of this market from 2015[96], the NRA decided that the geographic market was the whole country and that no operator had SMP and that therefore that there was effective competition on that market in Sweden.

113. Historically, municipalities have played an important role in deployment of fibre-optic networks in Sweden. In that country there are about 180 local networks in operation owned by municipalities (of 290 municipalities). The deployment of the fibre-optic network of the SMP operator in that country (Telia) varies greatly between areas. Two parallel fibre-optic networks are generally not deployed in Sweden.

114. In the prior PTA's analysis of market 3a from 2015[97], the NRA came to the conclusion that the geographic market should be the whole country, despite the fact that the NRA had identified varying competitive pressure by area. In the opinion of PTA, this variation had however not been sufficiently large and stable to justify separate markets or for differentiated obligations to be imposed by area. Telia was designated as a company with SMP on the market in question. The ESB Commission raised no objections to the above PTS position but urged the NRA to closely monitor development of competition on the market from all aspects, during the lifetime of the analysis, and to collect detailed information, such as by geographic area. This could make it possible for PTS to assess the parameters that could support effective competition in specific geographic areas.[98]

115. When analysing the retail market for broadband connections, PTS came to the conclusion in the above specified draft market analysis from 2019, that consumers no longer considered there to be substitutability between fibre-optic and copper connections in that

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[94] See SE/2019/2216 (fibre-optic) and 2217 (copper), dated 6 December 2019. On 7 February 2020, the EU Commission exercised its veto against the draft market analysis in question, as the PTS decided not to withdraw the analysis subsequent to the serious doubts expressed by the Commission.

[95] See SE/2019/2218.

[96] See SE/2015/1688.

[97] See SE/2015/1687.

[98] In an EU Commission case on page 3 it states: *"The Commission invited PTS, as it monitored the market during the following review period, to take into consideration the dynamics of competition at a detailed level in all market segments and to gather data per geographic area on a granular scale. In the view of the Commission, this would enable PTS to* ***consider the effect of competition safeguards imposed on market 3a to guarantee competition in a specific geographic area*** *or market segment in the light of the more locally varied competitive constraint from other next generation access infrastructures."* (PTA emphases edit)

country. Fibre-optic connections were the focal point of the analysis. In Sweden, the share of corporate connections had declined rapidly during recent years and was now among the lowest known in Europe (16%).[99] The share of fibre-optic was by far the highest (67%) but there were also quite a number of connections through cable systems (17%). In October 2018, FTTH/FTTB connections were accessible to 77% of households in Sweden and PTS expected this proportion to reach 90% in 2020. In 2015, copper local loops were accessible to 99% of Swedish households, but this number had dropped to 88% in 2018 as Telia had gradually been decommissioning parts of the copper network in rural areas. VDSL had only been accessible to 22% of Swedish households which meant that the majority of copper connections in Sweden were only ADSL. Cable systems were accessible to 37% of Swedish households, first and foremost in urban areas.

116. The PTS considered that the chain of substitution was broken between copper connections on the one hand, and fibre-optic connections and connections through cable systems on the other, as copper connections are generally more expensive and have less capacity than connections through the other systems. There was therefore no substitutability on the retail market between the connections in question and for that reason they were separate markets, i.e., on the one hand, for copper connections and on the other hand, for connections through fibre-optic and cable systems. The PTA considered there to be no substitutability between connections to Multiple Dwelling Units - MDU and Single Dwelling Units - SDU which meant that these were separate markets at retail level on the market for broadband access through fibre-optic cable systems. The reason was a bulk discount to MDUs. Broadband service through mobile networks or wireless access networks provided at a fixed location were also considered to belong to the retail market in question. The retail market in Sweden was thus divided into 3:

1. Broadband service through fibre-optic and cable systems to MDUs (Telia had 20% market share - third largest)
2. Broadband service through fibre-optic and cable systems to SDUs (Telia had 35% market share)
3. Broadband service through copper network (Telia had 75% market share)

117. It was then the conclusion reached by PTS that none of the above specified retail markets indicated that there was varying competitive pressure by area, which called for segmented geographic markets and that therefore the geographic market should be the whole country on all these markets at retail level.

118. The PTA furthermore came to the conclusion that the wholesale market in question (market 3a) was divided into two, i.e., on the one hand, wholesale market for fibre-optic connections (FTTH/FTTB) and on the other hand, wholesale market for connections over copper.[100] Cable systems were considered not to be included at wholesale level as wholesale access to such systems was not feasible. At wholesale level, connections to MDU and SDU by

[99] In Sweden, broadband service over copper is generally 2, 8, 24, 30 and 60 Mbit/s and only 20% of copper subscriptions provide higher speed than 30 Mbit/s. This is at the same time that the Swedish broadband market is characterised by demand for greater speed, i.e., over 100 Mb/s. The PTS considered that only copper connections over 30 Mb/s could possibly exert competitive pressure on connections over fibre-optic or through cable systems, but such copper connections were only 7% of the market for broadband connections over 30 Mb/s.

[100] Sweden is the first country in Europe to have planned such a conclusion, i.e., that there is no longer substitutability between copper and fibre on market 3a.

fibre-optic were considered to be the same market, unlike on the above specified retail markets as it was not possible to identify a price difference at wholesale level for connections to such buildings.

119. The PTS analysed competitive conditions by municipality, and there are 290 in the country. The PTS assessed whether competitive conditions varied within Sweden. Around the turn-of-the-century, many municipalities in Sweden had decided to invest in fibre-optic networks, among other things because of regional grants offered by the Swedish authorities. As previously stated, there are about 180 municipalities in Sweden where fibre-optic networks owned by municipalities are operated. Over 80% were operated as wholesale-only networks, i.e., they did not provide retail service[101],and even had access to public funds. In addition to their wholesale income. None of them provided access to SDUs on market 3a but only bitstream access (market 3b).

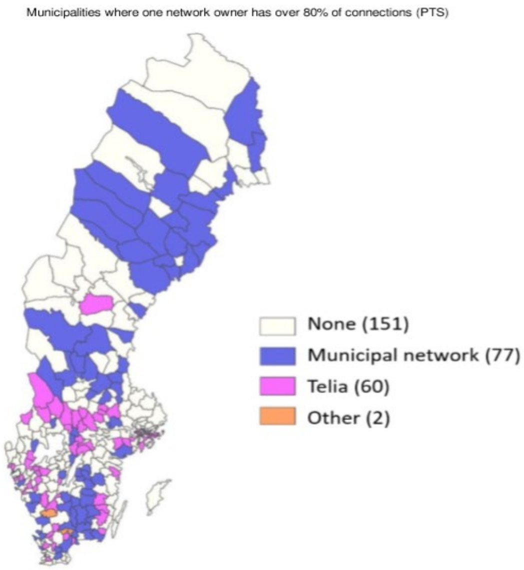
120. Because of this, the Swedish fibre-optic market was fragmented, as there were many active fibre-optic operators. Telia operated the largest fibre-optic network (P2P topology), which covered partly or wholly all municipalities in Sweden, but the Telia market share and deployment varied by municipality. It was almost unknown in Sweden that parallel fibre-optic networks were deployed (apart from approximately 10% of MDUs). As Telia did not have its own FTTH/FTTB fibre-optic network, the company provided retail service by receiving bitstream access (market 3b) to the local networks in question through Optical Distribution Frame - ODF or was responsible for operating active equipment on the fibre-optic networks in question.[102]

121. In 139 municipalities. There was a fibre-optic operator with over 80% market share, including Telia in 60 municipalities and local networks in 77 municipalities. In 151 municipalities there was no operator with more than 80% market share, and there was therefore more even division of market share between Telia and local networks.

[101] This means that fewer than 20% of such local networks provide service at retail level.

[102] In a news item from Cullen on this issue, published 16 December 2019, the following is stated on page 4: *"Municipally-owned local fibre operators must set cost-oriented wholesale prices according to national law. In SDU areas, Telia is the only operator offering wholesale local access to fibre,* ***while municipally owned operators only offer wholesale central bitstream access products.****"*

Figure 3 Deployment of networks by municipality in Sweden



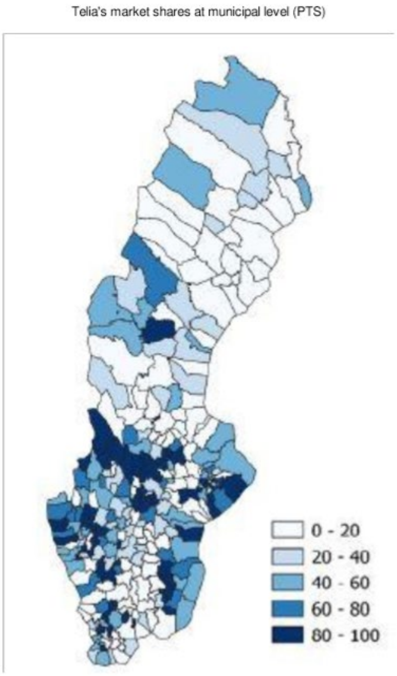
Source: PTS analysis of the relevant market SE/2019/2216 (fibre-optic) and 2217 (copper)

122. When analysing potential variance in competitive conditions between areas, PTS examined among other things, Telia pricing by area. Since price control was imposed on Telia fibre-optic in 2010 until the end of 2016, the company was authorised to have varying wholesale prices on market 3a by area, given that the difference was according to deployment costs. At the end of 2016, the fibre-optic price control on Telia was lifted and instead an obligation for EoI non-discrimination and Economic Replicability Test was imposed on the company. Today, Telia offers three price categories for wholesale FTTB to MDU. PTS considered that this price difference rather reflected population density and variation in deployment costs than varying levels of competition by area. Telia FTTH wholesale prices were the same across Sweden. Nor could PTS see that pricing of local networks was according to the level of competition.

123. With the above in mind, PTS came to the conclusion that the geographic market on market 3a for fibre-optic was the whole country, as the variance in competitive conditions between areas was not sufficient to justify geographic segmentation of markets. PTS came to the same conclusion with respect to market 3a for copper, but the EU Commission expressed doubts about that conclusion.

124. The PTS came to the conclusion that Telia had SMP on market 3a for fibre-optic, with 37% market share on the basis of wholesale connections at a national level, though the market share was very variable between areas. The next largest operator at a national level had a much smaller market share. It was furthermore the assessment of PTS that market share would be stable in the coming years as it was expected that investments in fibre-optic connections would decline.

Figure 4 Telia market share by municipality in Sweden



Source: PTS analysis of the relevant market SE/2019/2216 (fibre-optic) and 2217 (copper)

125. PTS finally came to the conclusion that Telia also had SMP on market 3a for copper, despite the fact that this market was in rapid decline.[103] Telia market share of wholesale connections over copper at a national level was close to 100% and 75% on the retail market for such connections.

126. As stated previously, the EU Commission raised serious doubts about the wholesale market for market 3a in fibre-optic being the whole country, when one considers the extreme difference in Telia market share between municipalities, the variance in Telia fibre-optic deployment between municipalities and the fact that local networks generally only offered central access provided at a fixed location for mass produced products in wholesale (market 3b) and not local access provided at a fixed location in wholesale (market 3a - black fibre).

127. When one examined the country as a whole, it seemed that competitive conditions were very varied, but the situation was different when one examined individual municipalities or sets of municipalities where similar competitive conditions pertained. In many instances, competitive conditions within municipalities or sets of municipalities were sufficiently homogeneous and often clearly distinguishable from other areas. In addition to this, municipalities seem to be suitable units for geographic segmentation with respect to size and ability to reflect fibre-optic deployment of all parties, and they offer clear and stable boundaries for the future. The Commission also reminded that areas where competitive conditions were dissimilar should not form the same geographic market.

128. The Commission expressed its concerns that inadequate geographic analysis could lead to erroneous or to extensive designation of operators with SMP. For this reason, PTS should reassess Telia capacity to leverage its SMP in the light of proper definition of geographic

[103] PTS believes that the copper market will be obsolete in 2025.

market. Telia market share at a national level was 37%, which indicated that there was significant competition on the market in question. Case data showed that Telia market share fluctuated by municipality from being very high to being very low. The average did thus not reflect the strength of Telia competitors in the various municipalities.

129. It was then stated in the EU Commission comments that even though PTS had provided some data to support the position that Telia behaved in a comparable manner in all municipalities, e.g., that there was no relationship between varying prices and competitive position, the analysis did not take sufficient account of the real boundaries of the Telia fibre-optic network. From a historical point of view, the deployment of copper networks of former monopolist incumbents in Europe was the whole country. This appeared not to be the case in Sweden on the wholesale market for local access provided at a fixed location (market 3a) by fibre-optic. Unlike access to the Telia copper network at national level, those requesting access who had access to the Telia fibre-optic network could only reach 37% of households if PTS plans were implemented.

130. It was therefore the conclusion of the EU Commission that there was need for a detailed geographic analysis of the market in question, in order to better reflect competitive conditions in the various municipalities so that it would be possible to adequately assess whether there was SMP, as appropriate in specific municipalities or in a set of municipalities, and for it to be possible to respect proportionality in the imposition of obligations.

131. In the BEREC Opinion dated 10 January 2020, the concerns of the EU Commission are in part endorsed. It was the opinion of BEREC, based on available data, that the PTS grounds for the conclusion to decide the geographic market as the whole country, were not convincing, and nor was the analysis adequate to make it possible to fully appreciate competitive conditions in the various areas. BEREC agreed with the Commission that there was a need for a detailed geographic analysis and that the PTS could follow more effectively the BEREC Common Position on geographic analysis from 2014. On the other hand, BEREC did not wish to state that a detailed analysis would necessarily show that the geographic market should be defined in smaller units than the whole country, as the Commission had strongly indicated in its serious doubts.

132. BEREC considered that it could be difficult for an NRA to conduct a detailed analysis of all areas, which could lead to microanalysis, and this also applied to PTS as there were 290 municipalities in Sweden. BEREC considered it clear that very little direct competition existed between parties on the market in question in Sweden, as parallel fibre-optic networks were generally not deployed in that country. PTS needed to deal more precisely with this in its analysis. BEREC further considered that inadequate indications had been provided by PTS to show that direct competitive pressure did exist and had provided no indications that indirect competitive pressure existed for it to be able to conclude that the country as a whole was a single geographic market. BEREC furthermore considered the PTS grounds that Telia pricing was the same nationwide to be inadequate without assessing other parameters. BEREC finally considered that the PTS argument that Telia was the only vertically integrated electronic communications company that provided connections over fibre-optic, applied rather to an assessment of SMP than to geographic definition of markets.

133. As previously stated, the EU Commission confirmed its serious doubts on 7 February 2020 and exercised its veto against the PTS market analysis in question.[104]

134. More precisely, the Commission came to the conclusion that the PTS geographic definition was not in accordance with the main principles of competition law and thus not in accordance with the EU regulatory framework. The PTS conclusion that this was a single geographic market had not been adequately supported by arguments. Competitive conditions between areas varied with respect to demand and supply substitutability and potential competition. For this reason, PTS needed to conduct detailed research on the geographic market. The Telia average market share in Sweden was 37%. A detailed examination showed that behind the average in question was a very high market share in some areas and very low in others. The average in question did not therefore reflect the real Telia market power in the varying areas. For this reason, the designation of Telia as having SMP needed to be re-evaluated as was also the case with imposed obligations, in the light of appropriate geographic definition, as the company did not have the same power at all locations to abuse potential SMP, particularly not in areas where the company was hardly present on the service market in question.[105] In the same manner, the draft underestimated the potential market power of other parties to the market in specific areas.

135. In its arguments, the Commission stated among other things that areas characterised by varying competitive conditions, could not form the same geographic market. Reference was furthermore made to the fact that when conducting geographic analysis, the scope of the former monopolist incumbent in electronic communications should be taken into account, and whether the potential SMP operator behaved in the same manner across his whole operational territory, and whether he faced significantly variable competitive conditions such that his operations were subject to competitive pressure in the specific areas or in other areas. It must also be established whether other electronic communications networks or electronic communications service constituted a real option to his electronic communications networks or service.

136. As only 37% of fibre-optic connections in Sweden were owned by Telia, and as the company was not a player on market 3a in many areas in the country, wholesale access to the company's fibre-optic system would not enable those requesting access to provide retail service nationwide. In Sweden, market 3a for fibre-optic connections was characterised by the fact that fibre-optic networks were generally not deployed in parallel, and in the large majority of cases there was only one network at each location. For this reason, those requesting access often had no alternative option for electronic communications network. In addition to this, the Commission did not agree with PTS that there was no significant price difference between Telia and specific local networks. It therefore seemed that competitive conditions were not sufficiently homogeneous nationwide to justify a single geographic market.

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[104] See Commission Decision of 7.2.2020 pursuant to Article 7 (5) of Directive 2002/21/EC (Withdrawal of notified draft measure) – Case SE/2029/2216: Wholesale local access to fibre networks provided at a fixed location in Sweden – C(2020) 619 final.

[105] In footnote 15 on page 15 in the above specified Commission Decision, the following is stated: *"The SMP analysis has to <u>assess the ability of the operator to behave independently of competitors and consumers</u>. Relevant factors might be inter alia if there are constraints stemming from law or statutory requirements, or* ***if competitive constraints from outside the geographic market would be strong enough to constrain the operators in adjacent geographic markets.*** *In this respect, the municipalities might not be in the position to freely set their prices as they are required to obey to statutory obligations, which generally require to set prices no higher than costs.* ***This might be a sufficient constraint****, subject to a detailed analysis."* (PTA emphases edit)

137. When defining geographic markets, the same criteria should be used as for service markets, i.e., taking into account demand and supply substitutability and potential competition. In the opinion of the Commission it seemed that competitive conditions, with respect to these parameters were not sufficiently homogeneous between areas in Sweden. As PTS defined municipalities as the smallest possible geographic unit, the NRA should have assessed these parameters within those units. On the basis of such analysis, PTS could have decided which areas were characterised by comparative competitive conditions.

138. With respect to demand substitutability, there was no fibre-optic network with national coverage and about 63% of connections at a national level were owned by operators of local networks, i.e., operators other than Telia. In many municipalities, there was only one wholesaler who could provide access to a fibre-optic network on market 3a. In such municipalities, the demand side of the market was different from other areas where there were more such operators. PTS had not succeeded in showing any demand substitutability between such areas.

139. With respect to supply substitutability, only a small proportion of consumers could choose between the services of more than one fibre-optic network. This therefore meant that there was no supply substitutability for a large majority of consumers.

140. The Commission agreed with BEREC that there was very little direct competition between fibre-optic networks in Sweden and that PTS had not provided adequate data that demonstrated direct competitive pressure and no data with respect to indirect competitive pressure.

141. With respect to potential competition, deployment of local networks over to neighbouring municipalities where the Telia share was high, was highly unlikely. Telia opportunities for deployment were however somewhat greater Parallel deployment of fibre-optic was also in the view of the Commission not economically feasible in many locations. The large majority of local networks (about 80%) operated solely at wholesale level. In these instances, Telia provided retail service by purchasing bitstream access on market 3b to those networks, as local networks did not offer access on market 3a (except in some exceptional cases in instances of MDU but never in cases of SDU).

142. In the opinion of the Commission, varying competitive conditions existed between varying areas in Sweden and they should therefore in general not belong to the same geographic market. PTS had not succeeded in demonstrating with adequate arguments why all municipalities in that country should belong to the same geographic market under these circumstances.

1.2.23 Summary of discussion on market analyses in Europe with respect to geographical definition of markets

143. Here above, the PTA has discussed most, if not all, cases that relate to geographic definition within the EEA on markets 3a and 3b in recent years that are of significance here. These are cases from 21 states where geographic measures in the form of segmented geographic markets and/or differentiated obligations by geographic area were variously applied or not applied.

144. It is clear that the weighting of geographic analyses has increased significantly in recent years, and that an increasing number of NRA's has applied geographic measures on the markets in question, particularly Market 3b. This development is first and foremost a result of the increased number of next generation electronic networks operated by competitors of the former monopolistic incumbent in electronic communications in the state in question. It is normal that geographic measures are first applied high in the value chain, e.g., on market 3b, before they are applied at a lower level, i.e., on market 3a. As development of such networks takes place step-by-step within states, first in the most densely populated and profitable areas, the situation can arise that competition varies by area within the states.

145. As is stated in the above specified summary, geographic segmentation has only been applied in 5 states on market 3a, i.e., in Finland, United Kingdom, Hungary, Italy and Poland. The United Kingdom is not part of the EEA anymore. This has been done from the commencement of market analysis in the three first named states for historical reasons, as in those states there are local electronic communications networks that have not operated outside their own territory. This has only changed in Hungary where these historical boundaries have changed in recent years. The cases of Italy and Poland from 2019, along with the newest market analysis from Hungary from 2017 are the first and only examples of geographic segmentation of the market 3a that result from varying competitive conditions between areas as a result of such development of electronic communications networks. There is no example of the existence of fewer than three independent networks (including the network of the former SMP operator), which has been considered sufficient to justify such segmentation of the geographic market. Of the examples of geographic delineation on market 3b there are however examples where two networks have been considered adequate, with the addition of other conditions, e.g., in the cases of Portugal and Spain.

146. For some considerable time, the EU Commission advised caution with regards to such delineation on M3a, but in three recent examples the Commission has considered that the criteria used by a number of NRAs have been too strong, and in addition has pointed out that the first realistic step could be to apply differentiated obligations by geographic area. One could in this connection indicate among others the cases of Lithuania, Poland and Italy from 2019 and Sweden from February 2020.

147. The examples appear to demonstrate that in recent times the most suitable geographic units are administrative boundaries, such as municipalities or postcodes, at the cost of telephone exchange areas of the SMP operator, as was formerly most common.

148. Furthermore, the most common criteria for choice of potential competitive areas were specific minimum deployment of networks of competitors of the potential SMP operator on the one hand, and on the other hand, that retail market share of the potential SMP operator has fallen below a specific level, generally 40% or 50%.