

Appendix C



Conclusions from the PTA's additional consultation on specific aspects of the planned amendments to the preliminary draft analysis of wholesale markets for local access provided at a fixed location and central access provided at a fixed location for mass-market products

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

14 September 2021

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1 Introduction

1. Between 30 April and 10 July 2020, the Post and Telecom Administration of Iceland opened a consultation on the preliminary draft market analysis of markets 3a (wholesale market for local access provided at a fixed location) and 3b (wholesale market for central access provided at a fixed location for mass-market products). Comments were received from Míla ehf. (Míla), Síminn hf. (Síminn), Sýn hf. (Vodafone), Nova hf. (Nova), Tengir hf. (Tengir), Reykjavík Fibre Network (Gagnaveita Reykjavíkur – GR), the Icelandic Competition Authority (ICA), and the municipalities of Stykkishólmsbær, Snæfellsbær and Fjarðabyggð.

2. The draft analysis documents submitted for national consultation on 30 April and 30 October 2020, for the purposes of this market analysis and subsequent decision, were made during the period of validity of Act no. 69/2003 on the Post and Telecom Administration. That Act has now been replaced by Act no. 75/2021 on the Electronic Communications Office in Iceland (ECOI), which came into force on 1 July 2021. Pursuant to Act no. 75/2021, the ECOI has assumed the statutory role of supervising implantation of the Act on Electronic Communications no. 81/2003. The ECOI generally assumes as a basis that prior solutions of the Post and Telecom Administration represent precedents for administrative action by the ECOI, as they are implementation and interpretation of the same provisions of the Electronic Communications Act. One must also regard the Decisions of the ECOI as a continuation of Decisions of the Post and Telecom Administration, among other things with respect to obligations that have been imposed on Míla. Whenever the Post- and Telecom Administration or PTA is mentioned hereafter, it should be read as the Electronic Communications Office of Iceland, ECOI, except when former Decisions and laws or regulation are referenced.

3. The PTA has now reviewed the comments from these parties, investigated the matter further and obtained various documents that shed further light on the competitive conditions in the markets in question. The PTA's position on the preliminary draft comments received from the above stakeholders is laid out in Appendix B. The PTA has also updated the preliminary draft (Appendix A) with reference to the changes made by the PTA in connection with the above-named consultation and the additional consultation that the PTA held from 30 October to 27 November 2020, and which is laid out in this document.

4. In this additional consultation, comments were received from the Icelandic Competition Authority, Míla, Síminn, Nova, GR and jointly from Hringiðan, Snerpa and Tölvun.

5. In the above-mentioned additional consultation document, the PTA proposed three specific amendments to the conclusions of the preliminary draft. More specifically, the PTA suggested abandoning its intention to move “optical fibre lines on the corporate market and to base stations” from the current Market 6 (terminating segments of leased lines, now Market 4) to Market 3a, abandoning its intention to impose an obligation of cost-analysed prices on Míla for the company's fibre-optic connections in the markets concerned, instead imposing an obligation of an ex-ante economic replicability test (ERT) on Míla and Síminn, and somewhat relaxing the provided criteria on which municipalities belonged to areas where there was believed to be more competition in order to significantly increase the number of areas with less stringent obligations. The PTA furthermore planned to carry out, during the lifetime of the analysis, an annual study of which municipalities would fall under this and update the list by way of special decisions.

6. Míla maintained, in its comments on the preliminary draft, that there was no longer substitutability between copper connections and fibre-optic connections in the above-named

markets. The company recruited the consulting firm Analysys Mason (AM) to prepare a report in support of its case. Síminn agreed in part with Míla's argument, believing that the PTA had failed to investigate the matter sufficiently. Vodafone, Nova, Tengir, GR and the ICA, on the other hand, agreed with the PTA's substitutability assessment.

7. To further investigate this aspect of the matter, the PTA commissioned the market research company MMR (Market and Media Research) to carry out a consumer survey to shed more light on the consumer experience in Iceland regarding this issue. Such surveys are one method that telecommunications NRAs can use to reveal such substitutability. In the additional consultation document published for consultation on 30 October 2020, stakeholders were given the opportunity to comment on the results of the consumer survey and the PTA's conclusions from it. The PTA also gave the above-mentioned electronic communications companies and the ICA an opportunity to express their views on comments submitted by others on this issue, with the exception that the PTA did not give Míla an opportunity to express its views on Síminn's comments, and vice versa, as the PTA believed that the separation of the companies must be observed, e.g. as regards legal services and defense of interests, in accordance with the settlement that Síminn Group made with the ICA in 2013 and which was revised in 2015. The PTA did not give Vodafone, Nova or GR an opportunity to express their views on each other's comments either, as these companies all agreed that substitutability existed, and it would not be reasonable to enable them to coordinate their comments. All had a chance to express their views on the ICA's comments, as the Authority is not a market participant. The ICA was also given an opportunity to express its views on the comments of all market participants.

8. In Sections 2-6 below, the PTA will first report the discussion under each topic in the additional consultation document published for consultation on 30 October 2020 before listing individual stakeholder comments under each topic and publishing the PTA's position on them. The same applies to Section 7, where the PTA will respond to comments that market participants submitted but which are not directly related to specific topics in the additional consultation document.

2 Consumer survey

2.1 PTA discussion in the additional consultation document

9. It was stated that in light of the serious and detailed comments from Míla and Síminn in connection with the consultation on the preliminary draft market analysis in markets 3a and 3b, the PTA had decided to have MMR conduct a consumer survey to shed more light on the consumer experience in Iceland regarding underlying electronic communications networks, i.e., copper and fibre-optic. Thus, consumers were asked which internet service the household purchased, and through what kind of telecommunication connection the service was provided. They were also asked which factors would be most important if selecting an internet service today, and households that had recently switched service providers were asked which factors had weighed most heavily in that decision. The consumer survey was conducted in the first half of October 2020, after the draft questions had been submitted for consultation with the electronic communications companies. The PTA received the results from MMR on 20 October 2020.

10. The consumer survey was published as an attachment to an announcement on the PTA's website on 27 October 2020. Stakeholders were given the opportunity to comment on the results of the survey and the conclusions that the PTA drew from it. The PTA's conclusions can be found in Section 2.2 below.

11. The PTA believed that the survey supported the assessment in the preliminary draft market analysis of markets 3a and 3b, i.e., that there was substitutability between internet services provided via a copper network and internet services provided via a fibre-optic connection; that the price of the service would be the dominant factor if consumers were to select an internet service provider today. Next came the quality of the service provider's services and speed was third. This indicated that the different speed options in copper and fibre-optic connections were not a particularly decisive factor when it came to consumer choice.

12. Consumers were also asked whether they had switched internet service providers and respondents who had done so in the last 12 months were then asked about the main reasons for the switch. Respondents mentioned price, quality of service and packages with accompanying services as the main reasons for making the switch. Connection speed was the fifth most frequent reason for switching service providers. This was consistent with the factors mentioned as most important if a service provider were to be selected today.

13. When looking at how customers experienced the quality of their connections, it came to light that consumers were generally very or rather satisfied with the quality of their connection and believed that it fulfilled the needs of the household. Nor did consumers generally experience problems or disruptions in their services. There did not seem to be a major difference between consumer experience of internet service quality in the household based on the telecommunications network through which the household's internet service was provided.

14. The PTA had attempted to examine the price elasticity of consumers by conducting an SSNIP test to ask about their response to a small but significant and non-transitory increase in price. It would be difficult to ask the question so that the respondents understood what was meant in the narrow time frame of such surveys, so the PTA presented the price increase of common internet subscriptions on an annual basis to put the increase in a clearer context. The results of the question indicated that consumers who said that their household had an internet

service over a fibre-optic local loop were just as willing as others to switch to a Ljósnet (VDSL) connection in the event of such a price increase.

2.2 Main conclusions of the consumer survey

15. In August 2020, the PTA began preparing a consumer survey with the aim of examining consumer attitudes towards internet services and the importance of underlying electronic communications networks when consumers decided which internet service to purchase. The main objective of the survey was to determine whether there is substitutability between internet services provided via copper lines and services provided via fibre-optic lines.

16. The first step in the project was to compose a research question that included a concise description of what the survey was intended to answer. The research question was the following, moving from a general to a specific question:

1. Does the general consumer make such a distinction between internet services accessed over fibre-optic cables and those accessed over a Ljósnet connection (VDSL, copper connection) that it is a decisive factor when a purchase decision is made, i.e., is there substitutability between the connection options or not.

2. What are the decisive factors in the decision to purchase internet services for home use.

3. Is the capacity (speed) of the connection a decisive factor in the purchase decision.

17. In light of the fact that advertised offers on the consumer market have primarily been differentiated by the included data volume, and prices are in most cases the same whether the internet service is provided over a copper or fibre-optic based network, the PTA also thought it necessary to examine consumer knowledge and awareness of which underlying electronic communications network the respondents were using. Survey results showing that consumers were not very aware of their underlying network would indicate that these networks are not important to them, which would in turn indicate substitutability between copper and fibre-optic cables.

18. The PTA also considered it necessary to examine carefully which factors in the purchasing decision determined the choice of service provider and whether there were differences in such decision factors that could be traced to one type of network over the other, which would indicate that substitutability was less likely.

19. In order to analyse the purchase decision as clearly as possible, respondents were asked specifically whether they had switched internet service providers recently and what factors had determined that purchase decision. The decision would probably be fresh in the minds of these consumers and they could explain the reasons better than consumers who have been with their service provider for a long time and are asked about possible reasons for their potential selection if they had to choose a service provider today. A significant change in purchase decision factors reported by consumers who have recently switched from a copper to a fibre-optic connection would indicate less likelihood of substitutability between copper and fibre-optic cables.

20. The PTA considered it likely that significantly more use of television and/or streaming services, and other such services that require large bandwidth, in households with a fibre-optic connection would indicate a lack of substitutability between copper and fibre-optic connections. Respondents were therefore asked about such use.

21. The PTA also believed that it was important to ask whether consumers experienced any problems when using their internet service, e.g., when watching many streaming services simultaneously or playing online games, due to the low capacity of their connection.

22. In order to analyse the answers according to the relevant variables, the PTA considered it necessary to ask in some detail about the current internet service, from which company it was obtained, and what its subscription plan was like.

23. The PTA drafted the survey questions and sent them to several market research companies to survey the price. Following a review of the quotes received, an agreement was made with the company MMR to provide consultation on the further development of the questions and the execution of the survey.

24. Updated draft questions were sent to stakeholders for consultation in mid-September 2020, and comments were received from Síminn, Míla, Vodafone, Nova and GR before the end of the month. The survey questions were then reviewed again with MMR, taking into account the comments received, as the PTA considered necessary. In preparing the survey and developing the questions, the PTA was also assisted by the ICA, which has extensive experience conducting such surveys in various markets. In developing the questions, the PTA also referenced the consumer survey conducted by the Swedish Post and Telecom Authority (PTS) for their recent market analysis of the same markets.

25. The survey was then carried out as an online questionnaire from 2-12 October 2020. At the end of October, the PTA received the MMR report containing the results of the survey. The report was published on the PTA website, along with a press release. The results of the survey were used as a reference in the additional consultation document presently under discussion.

26. The results of questions about which electronic communications company internet services are obtained from were not surprising, as the PTA regularly collects such statistics on a semi-annual basis. However, answers as to whether the service was purchased in a package with other services were interesting, with 71% of respondents answering that such a subscription package was purchased. This is especially common among Síminn's customers, with 85% of them saying that they purchased internet service as part of a package.

27. Questions were asked about the price of internet service only or the package, as appropriate, and according to the answers, an average of just under ISK 8,700 was paid for internet service only (most frequently ISK 7,000 and ISK 9,000) and just over ISK 17,200 for a package (most frequently ISK 15,000). These averages of answer and most common answers are in line with the tariffs of the electronic communications companies, which indicates that consumer price awareness is generally rather good.

28. When respondents were asked whether they knew through what type of telecommunication connection the internet service was provided, 65% answered in the affirmative, i.e., that they knew, 24% answered no to the question, and 11% said that they did not know the answer, which may be considered a no to the question. Over 99% of respondents answered the question.

29. Respondents were also asked whether they could identify the type of their connection, with all major types and product names of technological solutions for telecommunication connections over copper lines, fibre-optic cables or mobile networks listed as options. All respondents were asked this question, including those who said they didn't know the type of

their connection. Respondents were also asked whether they knew which company owned and operated the connection. Over 99% of respondents answered the questions. There were few significant findings when the question was analysed according to different parts of the country, the most notable being that respondents who live in urban areas in Reykjanes or East Iceland are less likely to know the type of their connection, or 27% and 31% of respondents, respectively. Other regions typically had a proportion of 9–20%. Those living in urban areas in East Iceland also named copper local loops more frequently than others, or 18% of respondents, while the number in other regions usually ranged from 2–6%.

30. As regards the question about television or streaming services, 69% of respondents purchase such services and more than 82% of those who do so purchase them as part of a package with the household's internet service. When asked to name these services, from a list where more than one option could be checked, 88% of respondents named Sjóntv Símans or Sjóntvþjónusta Símans, 54% named Netflix, 24% named Stöð 2, 18% named Sjóntv Vodafone, 16% named Disney+ and fewer named other services. Not much difference could be seen according to age, residence or family size, as it is common to purchase television and/or streaming services. More importantly, however, the purchase of such services does not seem to depend on the underlying telecommunications network. The main difference is that those who purchase Sjóntv Símans are more likely to be connected via a Ljósnet connection or copper local loops than other networks, as Síminn has not provided its television services through the company's IPTV system except on Míla's networks, and customers of fibre-optic networks owned by parties outside the Síminn Group have simply not had an opportunity to purchase the services over these networks. Síminn has provided its television content via an OTT solution that can be used on other underlying networks as of August 2018 but, until February 2021, only by using a special set-top box rented from Síminn. This solution is not widely used, compared to the IPTV solution. There was no significant difference in Netflix buyers, with 59% of those with a fibre-optic cable connection purchasing the service and 56% of those who have a Ljósnet connection.

31. Consumers generally do not experience problems with the capacity of their connection, with 16% answering that they did. Of those who have a fibre-optic cable connection, 10% answered yes, and 22% of those who have a Ljósnet (VDSL) connection. This difference is significant according to the margin of error, although the PTA does not believe that there is very much difference. The people who reported using a copper local loop were not a large group, but it was amongst them that the most difference could be found, with 29% answering yes. Respondents living in urban areas in East Iceland also stood out, with 40% answering that they experience problems due to lack of capacity.

32. There was no difference that could be considered significant between answers on the maximum number of television stations, set-top boxes or streaming services in simultaneous use according to the underlying network.

33. Respondents were asked about the three main reasons for their choice of service provider if they were to select one today. A list of the most significant factors was provided, and respondents could fill in their own answers. The results showed that the price of the service is the dominant factor if consumers were to select an internet service provider today. Next came the quality of the service provider's services and speed was third. This indicates that the different speed options in copper and fibre-optic connections are not a particularly decisive factor when it comes to consumer choice.

34. Consumers were also asked whether they had switched internet service providers and respondents who had done so in the last 12 months were then asked about the main reasons for the switch. Respondents mentioned price in an overwhelming number of instances, or 32%, quality of service came next with 13% and 12% mentioned packages with accompanying services as the main reasons for making the switch. Connection speed was in fifth place, with 5%, of the reasons for a recent switch from one service provider to another. This is consistent with the factors mentioned as most important if a service provider were to be selected today.

35. Respondents were asked about various quality aspects of connections. These were positive aspects, such as *“the connection always works, “the connection fulfils the household’s needs”* and negative aspects, such as *“I have experienced a broken or stalled connection”* or *“I have experienced distorted video in streaming services”*. When looking at how customers experienced the quality of their connections, it comes to light that consumers are generally very or rather satisfied with the quality of their connection and believe that it fulfils the needs of the household. Nor do consumers generally experience problems or disruptions in their services. There does not seem to be a major difference between consumer experience of internet service quality in the household based on the underlying telecommunications network through which the household’s internet service is provided.

36. The PTA attempted to examine the price elasticity of consumers by conducting an SSNIP test to ask about their response to a small but significant and non-transitory increase in price. It is difficult to present such a question so that respondents will understand what is meant by it in the short time that respondents generally spend on answering such online surveys. There is also the risk that the answer to such a question will not be particularly well thought out when the question is asked in this manner and in this context. To simplify the comparison and put it in context for respondents, the PTA presented such a price increase of common internet subscriptions on an annual basis. The results of the question indicate that consumers who say that their household has an internet service over a fibre-optic local loop are just as willing as others to switch to a Ljósnet (VDSL) connection in the event of such a price increase.

37. The PTA believes the most significant results of the survey as regards the substitutability assessment to be the following:

- That 35% of respondents do not seem to know the type of their household’s telecommunication connection when asked directly.
- Purchases of important service components such as video streaming services are equally common without regard to the underlying networks.
- The results for perceived quality, the connection’s fulfilment of needs and no problems with capacity are similar, regardless of the underlying network.
- Price is by far the biggest reason for a recent change of service provider, followed by the reputation of service providers and packages with accompanying services. Speed is in fifth place, following the answer that an employer chose the connection. The fact that price awareness is measured as being rather good supports this conclusion.
- Price, quality of service providers and speed (in this order) were the factors mentioned as being most important when respondents were asked to name important factors if they were to switch service providers.

A question about the response to a price increase for one type of connection showed that 25% of users with a fibre-optic connection consider it very or rather unlikely that they would switch to Ljósnet (VDSL) in the event of a price increase for the connection, while 33% considered it very or rather likely. If those who answered “don’t know” are left out, the proportion of those who are very or rather unlikely to switch is 36% while 48% are rather or very likely to switch. In view of all the above, the PTA cannot conclude otherwise than that the survey clearly indicates substitutability between internet services provided via copper connections and services provided via fibre-optic cables.

2.3 Stakeholder comments on the consumer survey and the PTA’s position on them

The ICA pointed out that the PTA’s additional consultation document included the conclusion that the results of MMR’s recent consumer survey for the Administration supported the PTA’s assessment in its preliminary draft market analysis of markets 3a and 3b that there was substitutability between copper network connections and fibre-optic network connections. The ICA had received a copy of the survey’s results. According to the results of Question 8 on the three main reasons for the household’s selection of internet connection, the price of the internet service would be the main reason for consumers, followed by quality and, finally, connection speed. This supports the PTA’s conclusion, i.e., that this indicates that the different qualities and speed options of copper and fibre-optic connections is not a particularly decisive factor when it comes to consumer choice.

In this respect, it is worth noting that according to the results of Question 9a2 in the survey, only 15% of consumers using Síminn’s Ljósnet connection said that the connection did not fulfil the needs of the household, compared to 9% of consumers with a fibre-optic local loop, although the percentage was higher for consumers with older copper connections. This would indicate that connections via Ljósnet are rather well regarded and that there is little difference between consumers’ dissatisfaction with fibre-optic connections and Ljósnet copper connections.

In Question 11, consumers were asked if their household had switched to a new internet service provider in the last three years. According to the results of Question 11c, pricing is the main reason for a household switching from one internet service provider to another. There was a considerable gap between that and the second most frequently named option named by consumers, i.e., quality, and the third: packages/bundles with the internet service. Only 5% of respondents mentioned connection speed as a reason for switching internet service providers.

With reference to the results of the MMR survey, the ICA could agree with the PTA’s conclusions in Section 2.1 of the additional consultation document, i.e., that the consumer survey supported the PTA’s preliminary draft assessment of substitutability between copper network connections and fibre-optic connections.

The PTA's position

The ICA’s comments support the PTA’s interpretation of the survey results, as described above, and the PTA’s conclusion of substitutability between copper and fibre-optic cable.

Mila noted that its comments on the PTA's preliminary draft included substantial comments on the criteria and results of the PTA's market definition, one of the main ones being that there was no longer substitutability between copper connections and fibre-optic connections in the markets in question and that there was no research on this fundamental element on behalf of the PTA in the preliminary assessment. Following these serious comments from Mila, the PTA commissioned a consumer survey "*to shed more light on the consumer experience in Iceland regarding underlying electronic communications networks, i.e., copper and fibre-optic*".

Mila was pleased to see that the PTA had taken Mila's comments into account to some degree and had decided to commission a consumer survey to shed more light on consumer behaviour in the market. On the other hand, and unfortunately, Mila saw various indications of *numerous shortcomings* in the PTA's consumer survey that would make its results rather meaningless. Mila considered the survey to be much too long and detailed, with insufficiently defined objectives and complex and unclear presentation of questions, so there was a considerable probability of respondents not grasping and/or misunderstanding the content of questions, cf. also Mila's suggestions in its e-mail to the PTA on 24 September 2020, during the preparation of the consumer survey in question. The PTA did not seem to take note of Mila's suggestions, however. Mila believes that these, and other, shortcomings had a significant effect on the respondents' answers and thus the results of the survey.

The above-mentioned comments in Mila's e-mail on 24 September 2020 were as follows:

"Surveys such as these are usually developed with a clear and defined objective in mind. Mila has limited information on the exact objectives of the survey and therefore does not have the necessary insight to comment on individual questions or the survey as a whole. The survey seems to be intended to collect information on various aspects of usage and user experiences, but it is difficult to assess the questions without having detailed information on the objectives.

Mila has no expertise in the preparation of questionnaires and usually seeks expert advice when conducting surveys with specific, well-defined objectives. Mila nonetheless considers it clear that the survey is long, complex and likely to confuse consumers, e.g., by using abbreviations that may not be familiar to everyone. It is important that options are simple and clear. Question 4a is an example of a confusing presentation of options where the same items occur more than once, and some are barely relevant to the question. Mila also finds it misleading, in Question 14, to present a monthly fee on an annual basis. It would be preferable to say that the monthly fee would be increased by so-and-so much rather than combining the increase in a total amount on an annual basis."

The PTA's position

The PTA reiterates that it received expert help in preparing the survey in question, as well as consulting with the ICA, which has extensive experience in conducting such surveys. The PTA also sent a draft of the survey to be reviewed by market participants and took into account the comments that the PTA, in consultation with MMR experts, deemed appropriate to consider. In developing the questions, the PTA also looked to the consumer survey conducted by the Swedish Post and Telecom Authority (PTS) in preparation for its market analysis of the relevant wholesale markets in 2019.

Mila's comments are mainly to the effect that the survey was long, complex and lacked clear objectives, and that this could confuse respondents.

The main objectives of the survey were set out in research questions, as noted above. The PTA considered it necessary to examine numerous aspects in the survey, including users' familiarity with connections and service plans, service functionality, connection capacity, various quality criteria, shortcomings of services, factors influencing user choice, how users experience

services and their willingness to change their connection and service provider. Answers on all these factors were then broken down by specific variables pertaining to the respondents, and more detailed follow-up questions were asked. The PTA could therefore not agree with all suggestions to eliminate questions or simplify the survey significantly.

Surveys based on consumers reporting their experience are always subject to some shortcomings and their results cannot be construed as scientifically proven facts. They can, however, provide good clues and contribute to a conclusion supported by additional data.

The PTA denies that the survey does not provide significant results, or that it is too long and vague, as the Administration was advised by experts who are experienced in preparing such surveys. The PTA notes that a very high proportion of respondents answered all questions, so it seems like the survey did not pose many difficulties for the respondents.

As the PTA described in Section 2.2, the survey touched on a number of factors that are important when making a substitutability assessment, and the results were mostly supportive of the substitutability assessment presented by the PTA in its preliminary draft market analysis.

Mila thought it right to point out that the PTA's interpretation of the survey's results did not seem to be compatible with the survey's actual results.

Mila did not agree, for instance, that on the basis of the answers to Question 11c, on the main reason for the last change in internet service provider, where 32% of respondents mentioned price, 13% the quality of the company's services and 5% speed, it could be assumed that price was generally the most important factor in consumer choice when question 11 showed that only 29% of respondents had switched internet service providers in the last three years, meaning that the question was only posed to 140 of the 1,054 respondents. Furthermore, according to the results of Question 11b, 42% of those who answered the question (i.e., 140) already had a fibre-optic local loop when they last switched, compared to 16% with a copper local loop, so the vast majority of respondents already enjoyed maximum speed and quality.

Nor could it be inferred from the question whether respondents had switched the type of service along with the service provider, i.e., from fibre-optic to copper. Question 11c, on the three main reasons for the household's choice of internet service provider today, had the same shortcoming, as only 139 respondents answered the question. As the questions were phrased, and in the light of the proportion of respondents, it could in no way be concluded that by mentioning price in response to the question, consumers were *generally* willing to switch the type of internet service, from more to less quality and speed. In order to make that assumption, the questions would have had to be phrased differently and more clearly.

The vast majority of respondents, or 57%, had not changed the type of their connection in the last 12 months, as the majority of respondents already had a fibre-optic connection. It should also be kept in mind that 7% of respondents had switched from a copper connection to their "current connection" while 1% of respondents had switched from fibre-optic to their "current connection", without the type of this connection ever being identified. This supported Mila's previous comments, i.e., that customers were not moving away from fibre-optic connections to other types, e.g., copper, but quite the opposite.

The PTA's position

Míla is right in that the reliability of answers to Question 11c is limited because only 9% of the total sample had switched service providers in the last 12 months, and only this section of the sample was presented with Question 11c. However, these results are in line with the results from Question 8, on the main reasons for choosing an internet service provider today. That question was answered by 1033 participants and the results were similar, i.e. most put price first and quality of the service provider second. The answers to these questions, viewed in context, support price being the most important factor in consumers' choice of internet connection.

The fact that more switch from copper to fibre-optic than vice versa does not exclude two-way substitutability. As an example, the PTA has documentation of considerable departures from GR's fibre-optic network in areas where the other option is Míla's VDSL copper network. According to these data, this is still happening to a significant extent. Furthermore, a significant proportion of fibre-optic users are ready to switch to Ljósnet (VDSL) in the event of a small but permanent price increase in fibre-optic internet connections, cf. the discussion of the results from Question 14 at the end of Section 2.2. above. The PTA has shown that although the trend is for more users buying fibre-optic connections, there is still some shift in the opposite direction, and on the basis of information recently acquired by the PTA from electronic communications companies, the Administration expects that at the end of the effective term of this analysis there will still be a considerable number of users with copper connections, also where fibre-optic local loops are or will be available.

Míla said that the PTA's attempt to carry out a so-called SSNIP test with this consumer survey also had serious deficiencies and that in fact, the results could not be trusted. The SSNIP test, which has become quite widely used, identifies substitute products by determining whether a small but permanent increase in the price (ca. 5-10%) of Product A would provoke consumers to buy Product B in such great numbers that the price increase of Product A would be unprofitable. If customers bought product A despite the price increase, products A and B would not be substitute products.

Míla said it had pointed out deficiencies in the question before the survey was conducted, but that the suggestions had not be taken into account. The problem with the PTA's approach is that the question concerned the bitstream services in Market 3b (price of internet services) rather than the local loop market of 3a (the "line charge") which is first in the value chain. Míla considered it unlikely that a 5-10% increase in the line charge for a fibre-optic local loop (an increase of ISK 150-300 per month or between ISK 1,200 and ISK 2,400 on an annual basis) would provoke consumers to switch to a copper connection. There also seems to have been no consideration of the cost of switching from one service type to another, but Míla believes that consumers would hardly consider it worthwhile to switch in light of the trouble and cost of replacing equipment. The PTA's apparent approach also seemed to go against the proper methodology announced by the PTA itself on page 194 of the preliminary draft market analysis of Markets 3a and 3b, as the PTA did not base its question on Market 3a.

The explanatory note to the EU Commission recommendation states that before wholesale markets are defined, one should assess whether there would be effective competition at the retail level if obligations on the underlying wholesale markets were not in place, i.e., the modified Greenfield approach. If it is believed that there would be effective competition in such a situation, then the wholesale markets should be examined, and this examination should commence with the market that is first in the value chain (Market 3a). It should subsequently be evaluated whether there is a need for obligations at the next wholesale level (Market 3b). In

exceptional cases, if obligations on the wholesale markets in question would not suffice to create effective competition on the retail markets under discussion, it would be possible to consider obligations on the retail markets in question.

The PTA's position

The PTA believes that it was right to base the increase on the fee that consumers generally pay for internet connections. They buy the connection as a single package and their decision to change their connection must depend on the total price and not on the price of individual wholesale procurements. It seems to be a uniquely Icelandic phenomenon for a line charge to be a special cost item in the retail market. With this question, the PTA is examining substitutability in the retail market, so the question is based on the total price of the retail service. The PTA does not agree that the cost of switching connections is a significant obstacle because this usually means replacing rented equipment, as users rarely invest in their own endpoint equipment.

The PTA does not consider Míla's reference to methodology in assessing the competition status on retail markets and the order in which wholesale markets are analysed to have any bearing on how to conduct a substitutability test.

Míla claimed that in Question 14, on the SSNIP test, no distinction seemed to be made between the services respondents were currently buying, and that the introduction to the question clearly stated that internet services, now and for a long time, were generally sold at the same price, regardless of the type of telecommunication connection through which they were provided, and that respondents were asked how likely or unlikely they were to switch to a service plan based on a "Ljósnet connection" instead if the monthly price of the household's internet service subscription would increase by approximately ISK 12,000-15,000 on an annual basis, while the price of other types of internet connections remained the same.

This was the last question in a very long survey. The term "Ljósnet connection" was never defined in the question and was not generally used in the survey. Furthermore, the question was posed at the end of a section on mobile networks. Míla considered this misleading and had considerable doubts as to whether respondents understood what was meant by the term "Ljósnet". Míla also considered the introduction to the question to be very leading.

Míla furthermore complained that the question was based on an annual rather than monthly price, making it difficult for respondents to grasp the actual monthly percentage increase.¹ The results also clearly indicated that only 17-19% of respondents considered it rather or very likely that they would switch, which in no way supported the PTA's apparent conclusion, i.e. that those who already had a fibre-optic connection were just as likely to want to switch to something else.

The PTA's position

The PTA points out that the response rate is high throughout the survey and that the proportion of those who answer "don't know" is not higher in Question 14 than in previous questions. The PTA therefore believes that the placement of the question did not have an effect on the response.

¹ Respondents believed they paid ISK 8,683 per month for their internet service, according to Slide 27 in the survey. Annual savings of ISK 12,000-15,000 would be 11.5% - 14.4% of ISK 8,683 and thus higher than the reference range of the SSNIP test.

It is nevertheless true that the question should not have been under the subheading Mobile Network Connections in the report. However, it was not under that heading in the survey itself and there was nothing to indicate to the respondents that the question was related to mobile networks.

The PTA believes that consumers are generally aware of the meaning of the term Ljósnet. For years, the word "Ljósnet" has been used extensively in Síminn's marketing of its services, and Síminn Group has contacted the Consumer Agency on four occasions because the company believed that GR was unfair in pointing out in its marketing that Ljósnet is not a fibre-optic connection all the way to the home. Those who have purchased the Ljósnet service at any time know that the connection into the house is through the utilities that were already present and connected to the old telephone system. There was considerable media coverage of the marketing of Ljósnet at the time. Many survey questions present Ljósnet and a fibre-optic connection as different options, clearly indicating that they refer to two different things. In view of all this, the PTA believes that most respondents should have been fully aware of what was meant. As for those who may be confused about the nature of these two products, Síminn Group must bear considerable responsibility by its long use of the term "Ljósnet" to market a VDSL product of this kind. Furthermore, the PTA based its conclusion on the response rate of those who already have a fibre-optic connection and should be aware that the question was whether they would be willing to switch to another technology.

The introduction to the question only describes a fact about the market. Míla does not provide any arguments to as to how the introduction may be leading, and the PTA cannot see how this could be substantiated.

The PTA considers a price increase on an annual basis to be a reasonable reference. It is generally not the case that households change their underlying telecommunications network monthly or many times a year, far from it. SSNIP tests are based on a permanent price increase, with the reference usually being at least one year. The average price of the most common subscription plans was used, and the actual increase is not higher than the SSNIP criteria.

The proportion of those who are likely or very likely to react to an increase by switching connections is much higher than Míla claims. Out of all respondents, it is not 17-19% but 17+19%, or 36%, who would make the switch. If only users with a fibre-optic connection are taken into account, 25% consider it very or rather unlikely that they would switch to Ljósnet (VDSL) in the event of a price increase for the connection, while 33% considered it very or rather likely. If those who answered "don't know" are left out, the proportion of those who are very or rather unlikely to switch is 36% while 48% are rather or very likely to switch. It is therefore clear that a larger proportion of respondents is ready to switch than not.

Míla claimed that it was clear that the results of the PTA's consumer survey, as they seem to be interpreted in the Administration's additional consultation document, were in no way consistent with the results of a survey on consumer attitudes towards copper and fibre-optic, dated 13 October 2020 and conducted by Gallup on behalf of Míla between 30 September and 7 October 2020; a survey that Míla believed showed a much clearer consumer attitude towards each service, cf. Accompanying Document 1 with Míla's comments on the additional consultation document.

The sample in Gallup's survey was 1,450 all over the country, 18 years and older. The participation rate was 64.5%, divided approximately equally between genders. After weighing,

64% of the respondents lived in the Greater Reykjavík Area and 36% elsewhere. It was noted that the report and its contents were only intended for internal use by the company that commissioned the survey, i.e., Míla.

Míla had Gallup ask four questions in the survey:

1. What do you think would be a better choice of internet connection for your household, a fibre-optic connection or copper local loop?
2. Do you have a fibre-optic or copper connection in your household?
3. If you had the choice of either a fibre-optic connection or a copper connection, which would you choose if they cost the same?
4. How much more inexpensive would the copper connection have to be for you to choose it over the fibre-optic connection?

A section at the end of the report includes instructions on how to interpret and weigh the results. The answers to the four questions and Gallup's interpretation of the results are discussed in more detail below.

The PTA's position

As previously noted, the results of surveys carried out by stakeholders to support their case in administrative proceedings must be viewed with some reservations. The PTA believes that Gallup's survey has various shortcomings, as will be discussed in more detail below when appropriate.

Míla had Gallup ask, *first*, whether the respondent thought a fibre-optic or copper connection would be a better choice of internet connection for the household.

Of those who gave a definite answer, (86.5%), 83.4% named the fibre-optic connection, 14.3% the copper connection, 1.6% something else, and 0.8% no internet connection. If those who did not give a definite answer were included, 72% would have named the fibre-optic connection and 12% the copper connection.

The PTA's position

The question in the Gallup survey about which option consumers would pick if the cost was the same cannot be considered a definite indication that there is no substitutability. The fact is that a large part of consumers still buys access to copper connections, whereof a considerable number is located in areas where fibre-optic local loops are available. In actuality there are many factors other than the type of connection that influence the choice consumers make, such as the price, the quality of the service provider, and the composition of the bundles offered. Even though respondents believe that they would opt for fibre-optic cable if faced with a choice where no other factors needed to be considered, this is not generally true in practice. In general, consumers are satisfied with the performance of copper connections, as indicated by the findings of the MMR consumer survey and are therefore not particularly likely to take action in order to change their connection, unless specifically encouraged to do so through marketing measures or pressure from the service provider, e.g., when there is a fibre-optic rollout where such connections have not been previously available.

The PTA also points out that Gallup’s question only has two options: a fibre-optic and copper connection. There are many different types of copper connections, from relatively low-capacity ADSL to VDSL with a capacity of 100 Mb/s, while some VDSL connections only have a capacity of up to 50 Mb/s. Respondents are not given any opportunity to comment on their position on Ljósnet, the high-capacity VDSL connection that Síminn Group has marketed aggressively for many years and until the present day. Thus, the substitutability of a fibre-optic connection and the most high-capacity copper connections is not investigated specifically, which is of significant importance when there is a chain of substitution, as the PTA believes there to be in the market.

Mila had Gallup ask, *second*, whether the respondent had a fibre-optic or copper connection to the internet in the household.

The result was that 83% named the fibre-optic connection and 14% the copper connection, with 86.5% of respondents answering the question.

The PTA's position

The PTA believes that the responses to the consumer surveys clearly do not give an accurate picture of the extent of the proportion of users with fibre-optic connections. In the survey conducted by Market and Media Research (MMR) for the PTA, 51% of respondents (61% of those who gave a definite answer) said they had a fibre-optic connection, whereas in the Gallup survey 72% of respondents gave the same answer (83% of those who gave a definite answer). However, according to the real numbers, 66% of local loops currently in use were fibre-optic and 34% were copper as of mid-2020. Respondents who said they did not know what kind of connection they had constituted 17% in the MMR survey and 13.4% in the Gallup survey, and the discrepancy between the answers and the real numbers indicates that there are in fact more users who do not know what kind of connection they have. This is another indication that both types of local loops can be of the same general use to consumers and are likely to remain so during the term of this analysis, whatever may happen later.

Mila had Gallup ask, *third*, whether the respondent would choose a fibre-optic or copper connection if both options were available and cost the same.

Of those who answered (74.8%), 67.8% said definitely a fibre-optic connection, 13.8% very probably a fibre-optic connection, 7.7% probably a fibre-optic connection, 9.4% said they didn’t care (neutral), 0.2% probably a copper connection, 0.2% very probably a copper connection, and 1% definitely a copper connection. If those who did not give a definite answer were included, 67% would definitely, very probably or probably choose a fibre-optic connection.

The PTA's position

This question is very similar to Question 1 in Gallup’s survey and consequently has the same problems. No distinction is made between high and low-capacity copper connections. The results are also not in line with actual purchasing behavior, as a much larger proportion buys copper connections. 25% did not answer the question.

Mila had Gallup ask, *fourth*, how much more inexpensive a copper connection would have to be, at a minimum, for the respondent to choose it over a fibre-optic connection.

Only those who chose a fibre-optic connection in Question 3 received this question. 624 out of 935 received the question, or 67%. Of these 624, 439 responded to the question, or 69%, which is 48% of the total number of respondents in questions 1-3.

Of those who answered, 41.8% said that a copper connection was out of the question, or 19.6% of the sample that answered questions 1-3. 11.9% said that copper would have to be at least 75-99% more inexpensive, 22.2% said 50-74% more inexpensive, 18.7% said 25-49% more inexpensive, and 5.5% said 0-24% more inexpensive.

The PTA's position

The same applies to all questions in Gallup's survey, i.e., respondents are not given an opportunity to comment specifically on high-capacity VDSL connections, only on undefined copper connections.

This Gallup question is not a traditional SSNIP question, but a kind of reversal of such a question. Professor Valdimar Sigurðsson, who wrote a report for Míla on MMR and Gallup's consumer surveys, criticizes this question in various ways. He writes:

"The market is about much more than just price competition, so there is always a risk that SSNIP tests will provide an unsatisfactory definition of the market (substitution). This can result in a too narrow definition of markets, as there is competition in many more aspects or attributes of products than price alone."

He also believes that it would have been preferable to use an interval scale.

With regard to Question 4 in the Gallup survey, it should be kept in mind that only those who had previously answered that they would rather choose fibre-optic cable were given the option of answering the question, which meant that 33% of the participants in the survey were excluded from answering. This question is therefore not at all indicative of the general attitude of consumers, which must be considered a fundamental flaw in the survey in question.

There is a discrepancy between the findings of the MMR survey and those of the Gallup survey on the response to a price increase for a fibre-optic connection. The PTA would like to point out that one aspect of the answers is nearly identical in both surveys, i.e., that about 30% do not give a definite answer. This indicates that a large part of consumers is not informed about the difference between copper and fibre-optic connections, and that they have not considered whether one option is better than the other.

If the numbers in the MMR survey² were presented in the same way as those in the Gallup survey, i.e., that calculations are only based on those who give a definite answer, the findings are that about 52% think it very or somewhat likely that they would switch to a Ljósnet connection (VDSL) if the price of their internet subscription was increased by ISK 12-15,000 per year.³

Míla said that as the surveys seemed to have such wildly varying findings, at least according to the interpretation of the PTA, the company decided to request an independent opinion from

² Question 14 on page 162 in the MMR survey

³ This percentage is calculated based on the answers of all the participants, irrespective of the type of connection they have. If only the answers of those who said they had a fibre-optic connection are considered, the corresponding percentage is just over 47%, see the MMR survey, page 164.

Valdimar Sigurðsson, Professor at Reykjavik University's Department of Business Administration, on the surveys in question, cf. Accompanying Document 2 with Mila's comments on the PTA's additional consultation document.

The professor concluded, based on 12 specified factors, that this was a case of "replacement" rather than fibre-optic and copper being substitute products.

First, Valdimar said that the price of the service was not the dominant factor in consumers' choice of internet service provider according to MMR's survey,

adding that the MMR survey had been somewhat product-oriented, with little testing of consumers' experience of the actual solutions being sold. Furthermore, consumers were not buying "internet services" but rather the quality and results of such services, such as information, communication, games, etc., where time was money and waiting a few seconds could prove difficult.

In other words, the survey was a poor indicator of "consumer experience in Iceland regarding underlying telecommunications networks," as mentioned on page 3 of the PTA's additional consultation document and did not give the consumer an opportunity to experience differences between different services. The survey did not address purchasing behaviour, knowledge, pricing and the reasons for choosing an internet service provider, which was not a direct indicator of the connection itself.

The PTA believed that the survey offered support for the substitutability of internet services via copper and fibre-optic networks, referring to price being the dominant factor in consumers' choice of internet service provider. For one thing, the question, which was rather long and explained in 164 slides, referred to internet service providers and service plans, but this could be somewhat confusing for participants, and one might wonder why this wasn't separated more clearly.

The PTA's position

The PTA is aware that consumers' choice of internet connections is governed by many synergic factors. It is indisputable, however, that price is the dominant factor for most. The MMR survey shows conclusively that price is the most important factor in the mind of consumers, while the feature that primarily distinguishes copper and fibre-optic connections, i.e. speed, carries less weight.

The PTA does not agree with the claim that the MMR survey does little to address the experience of consumers. The questions under items 7, 8, 9, 10, 11 and 12 are intended to look at consumer experience, usage patterns and attitudes regarding various factors relevant to the purchase of connections. The MMR survey addresses purchasing behaviour, knowledge, pricing and reasons for choosing an internet service provider, and claims to the contrary are incomprehensible. The PTA does not agree with the conclusion that users of VDSL connection have to experience delays of several seconds.

The PTA has already responded to Mila's comment on the length and complexity of the MMR survey, see the response above.

Second, **Valdimar** said that a vast majority of consumers had named other reasons than price.

The professor noted that another thing that was clearly indicated in the MMR survey, when it came to the stated choice of internet service provider, was that price was only one of several main factors in consumers' decision-making, according to the results of the survey. Price was most frequently mentioned (48%), followed by quality of service (44%), connection speed (37%), a package of included services, included data volume and other factors.

This could in fact be reversed to say that 79% of consumers had first named another factor than price as one of the main reasons for their choice of internet service provider for their household if they had to choose today. In addition, the quality of the service and the speed of the internet connection are part of the same, i.e., the quality of the service depends on the speed of the connection. Who said that consumers based their selection on a single factor?

The PTA's position

As previously noted, the PTA is aware that consumers' choice of internet connections is governed by many synergic factors. It is indisputable, however, that price is the dominant factor for most. The MMR survey shows conclusively that price is the most important factor in the mind of consumers, while the feature that primarily distinguishes copper and fibre-optic connections, i.e., speed, carries less weight. This is a clear indication that connection capacity, which is a factor that Míla has focused on in its criticism of the PTA's substitutability assessment, is by no means as decisive a factor as Míla claims.

Factors other than price had a combined total of 65% in Question 8.1, with 14% answering that they did not know what would be the main reason for their choice of internet connection. With this question, the PTA considered most important to examine the weight of speed, which is the main differentiating factor between copper and fibre-optic connections. The weight of that factor was 12% compared to a combined total of 74% for other factors. The PTA believes this to be a strong indication that speed is far from being a decisive factor for the vast majority of Icelandic consumers, meaning that there is substitutability between VDSL and fibre-optic connections. The PTA believes that this will be the case for the term of this analysis, whatever may happen later. The PTA intends to repeat such consumer surveys regularly to monitor this development.

Third, Valdimar said that this was a multi-attribute decision making process.

He noted that according to the survey, the consumer choice was a case of multi-attribute decision-making rather than a decision based on one attribute, i.e. price, and that companies had a marketing mix consisting of the different attributes of the value being sold. Traditionally, such attributes would at least include product, price, place and promotion. Price would only be one of these factors. It would be a category mistake to claim that price is the main factor when the quality of the product, as a factor, consists of the main attributes mentioned (or checked), such as speed, accompanying services and data volume, i.e., these are subcategories or items pertaining to quality. These items belong to the same overall concept, informing what the product does for the consumer.

By dividing them into more categories and having respondents name three items, the price factor could be pushed to the top, but this might be the result of the question's presentation, with three potential reasons named for each consumer. In this case, there is reason to criticise both the execution and the interpretation.

The PTA's position

As previously noted, the PTA agrees that many synergic factors determine consumers' choice of internet connections. The importance of the result does not primarily lie in where price is ranked but the fact that speed is far from being the most important factor. Speed is the main difference between copper and fibre-optic connections, and its little weight indicates substitutability. In light of this, the alleged shortcomings of the question's presentation have little significance.

Fourth, Valdimar said that the methodology of MMR's survey was open to criticism.

He also noted that there was no information on how the question "*What would be the three main reasons for the household's choice of internet service provider today?*" (slide 70) was presented, which could certainly influence the results. It could have an influence, for example, if categories in the survey were pre-determined or if price was the top factor to check. There was no information on whether categories had been presented or whether the questions had been open-ended. Pre-selected categories would raise questions about the factors presented there; what was their source, and had any qualitative research been carried out or sources found to examine what factors should be presented?

The PTA's position

The question was presented by first providing eight predefined options in the following order: quality of the service provider's services, package with included services, television material accessible over the connection, connection speed, included data volume, promotion/offer from service provider, price and, finally, reputation of service provider. There were also these options: Other – what? Don't know and Do not want to answer. The next question was about the second most important reason for the choice, with the same presentation as before, excluding the option that had already been selected. Finally, there was a question about the third most important reason, with the same presentation apart from the previously selected options.

There was therefore nothing to direct the respondents towards the answer "Price" and respondents had the option to add factors. The predefined options were based on the PTA and MMR staff's general knowledge of marketing and consumer behavior. Furthermore, market participants and the ICA were given an opportunity to submit comments. Since it was possible to add factors if something had been left off the list, there was no need to examine specifically which factors should be predefined before the survey was composed, as that would presumably have required a similar question to this being posed twice, which must be considered unnecessary.

Fifth, Valdimar said that the total price had not been assessed.

The professor said that according to the basic principles of economics, a sensible consumer should be willing to pay a price for a service that is in line with the savings that come with using the service (in this case an internet connection) plus the cost of another service plan. However, this economic value to the customer was not measured in MMR's survey. Instead, price was more likely to be referred to as a qualitative variable (e.g., on slides 70-82).

The consumer's life-cycle cost was not assessed either, although it should be clear that a better internet connection could save substantial amounts. A key element of estimating the product's total price is to look beyond subscription fees to examine the costs of a copper or fibre-optic

connection over the entire life cycle of the service plan, or at least in the long term. Prices would thus be relative and quantitative rather than absolute or qualitative.

The PTA's position

The PTA believes that such speculations would have been likely to lengthen the survey and make it unnecessarily complex. As previously noted, the main purpose of questions involving price was not carry out a detailed investigation of price formation and price awareness but mainly to analyse the weight of speed compared to other factors that may determine consumer choice.

Sixth, **Valdimar** said that consumers and target groups were heterogeneous.

According to Valdimar, the PTA's conclusion that the price of services was the most decisive factor in consumers' choice of internet service provider indicated a hidden assumption of consumers being a single or homogenous group. Just as people's internet use was different, it was clear from the MMR survey that emphasis varied, e.g., when it came to different demographical target groups. For example, of respondents who were 68 or older, only 7% mentioned price while 93% mentioned other reasons such as a package with included services (33%). It's therefore not possible to generalize about consumers in any way and it was clear yet again how many attributes the decision involves and how it varies according to consumers. Price was therefore overrated in the PTA's interpretation.

According to slide 40, only 4% said that their household's telecommunication connection was a copper local loop, so this is a product that has reached the end of its lifetime curve.

According to slide 65, 29% of those who used a copper local loop experienced problem with the capacity of their internet connection.

The PTA's position

The PTA believes that the results must primarily be examined with regard to the total set of consumers. Despite the differences between some individual groups of users, the proportions in the overall market are most important when assessing substitutability, although the results of the survey are also presented broken down by various delimitations of user groups. The PTA reiterates that it is not the importance of price that is most vital when it comes to substitutability but the little weight of speed.

As regards slide 40, it has already been established that there is some discrepancy between what users believe and what is true regarding the number of connections of each type. In fact, three different terms are used for copper connections (copper local loop, VDSL and Ljósnet) in the results shown on this slide, and their combined weight is 23%. This percentage is nevertheless considerably lower than the actual percentage of copper local loop users. This shows that this product has not reached the end of its lifetime curve. It is foreseeable that the product will largely disappear in the next decade or so, but the PTA has assessed the development of this ratio over the term of this analysis and has concluded that a significant proportion of users will still use copper connections in the next three years.

As regards slide 65, the professor does not take into account that Ljósnet is a service provided over a copper local loop. The difference in user experience between Ljósnet and fibre-optic fibre users is not particularly significant, as 72% of Ljósnet users do not experience problems, compared to 81% of fibre-optic network users.

Seventh, **Valdimar** mentioned the price elasticity of consumers,

saying that in the additional consultation document, the PTA had stated that an attempt had been made to investigate the price elasticity of consumers with an SSNIP test, cf. Question 14 (on slides 162-164), which is sometimes used to assess whether products belonged to the same market by examining whether a company could raise prices significantly and irreversibly and still make a profit. But this would usually be action-specific, as a 5% price increase for at least one year. In such a test, consumers would usually be asked if they would switch products/services in the event of a price increase. The PTA had noted that it would be difficult to ask the question so that the respondents understood what was meant in the narrow time frame of such surveys.

Valdimar therefore found it peculiar to see this question placed at the end of the survey, and also believed that a separate survey could have been conducted around the SSNIP test. It would thus be safe to say that this attempt by the PTA to conduct an SSNIP test had little meaning, plus the interpretation of the data was wrong, cf. the further details below:

- Many consumers purchased a service package that included an internet service. As a result, they sometimes did not know the household's internet connection.

- The question was based on a Ljósnet connection. Why not ask about a copper and fibre-optic connection? Was a definition of Ljósnet available somewhere? This must be considered confusing, especially in light of the consumers' knowledge of the product.

- The question was as follows: *"Let's say that your **monthly** subscription fee for internet services would increase by approximately ISK 12,000-15,000 on **an annual basis** while the price of other internet connections remained the same. How likely or unlikely is it that you would switch to a service based on a Ljósnet connection instead?"* (Slide 162). This question is long, confusing and posed at the end of a long survey. The survey jumped back and forth between referring to a monthly subscription fee and total cost on an annual basis. Earlier in the survey, a question referred to a monthly fee without further complications, and most people related to a monthly rather than an annual fee. Would the question have the same results if the increase was ISK 1,000-1,250 per month?

- On page 4 of its additional consultation document, the PTA maintained that the results of the question indicated that consumers who said that their household had an internet service over a fibre-optic local loop were just as willing as others to switch to a Ljósnet connection in the event of such a price increase. Despite this, slide 164 states that there is a significant difference between groups when it comes to the current telecommunication connection (the little star in the left corner), based on a 95% confidence interval. That is to say, there is a difference between the answers of those who responded to this question, according to the background question on telecommunication connection.

According to slide 162, the question was accompanied by the following explanation: *"In general, internet services, now and for a long time, are sold at the same price, regardless of the type of telecommunication network through which they are provided"*. There is a question as to whether this wording is leading. There is, in any case, a strong suggestion of the connections being comparable and of price increases being unusual.

- To ask consumers directly about price increases would always be likely to result in a great error. Such questions had generally little validity as consumers were generally opposed to price increases, sometimes believed they could influence companies by saying that they would react to a price increase and were prone to overestimate their response and underestimate their habituality when it came to changes. Just as it is usually not valid to ask about health and sustainability, as consumers will pretend to be without blemish or overestimate their positive behavior, some consumers will consider it their civic duty to oppose price increases. Because of this, price increases were usually measured professionally with price experiments or choice-based conjoint analysis, where the effects of price were derived from consumer choice rather than asking consumers directly.

The PTA's position

The PTA notes that an SSNIP test may be based on a 5-10% price increase.

The PTA references its previous answer to Míla's comment on the placing of the above question. The PTA is aware that such a question cannot provide a final and exact answer on substitutability. The results, however, indicate substitutability and are examined in the context of other factors that may have an effect.

It has come to light that not all consumers are well informed about the type of their connection, which can result in some error. However, there is nothing to indicate that this will lead to a particular bias. The fact that many people buy a connection as part of a larger service package and not everyone is fully aware of the type of connection should therefore not have a significant effect.

As noted before by the PTA in a previous answer to a comment from Míla, Ljósnet is a well-known term, having been marketed by Síminn Group for many years. The PTA believes that everything points to a chain of substitution in the market, and in order to investigate this further, the question concerned the potential substitutability of fibre-optic and the type of copper connection that came closest to it in terms of capacity, i.e., the VDSL connection marketed under the name Ljósnet. That is why the question concerned the respondent's willingness to switch to Ljósnet rather than some undefined copper network.

The PTA believes respondents to be generally capable of understanding question no. 14, as three lines of text in clear Icelandic should not pose any difficulties for the average person. The PTA completely rejects the notion of the question being leading. With regard to the definition of an SSNIP test, where one aspect is a permanent price increase which the professor himself says is for a term of at least one year, the PTA considers it natural to ask about the effects of the price increase on an annual basis, as households do not regularly or frequently change their underlying telecommunications network.

The PTA agrees that the wording in the final sentence of paragraph 10 on page 4 in the additional consultation document is inaccurate at best, and the PTA will not use such wording in the updated market analysis (Appendix A). There is a considerable difference between the answers of those who believe they have a fibre-optic connection and other groups of respondents. The PTA believes, however, that a comparison of these groups is not the most important thing to consider in the results of Question 14. The PTA believes that the only thing worth examining is the answers of those who had previously said they had a fibre-optic connection. Out of this group of respondents, 33% considered it very or rather likely that they would switch to a Ljósnet connection if the price of the fibre-optic connection increased. If

those who answered “don’t know” are left out, the proportion of those who are very or rather likely to switch is 48%.

Míla’s comment on the introduction to the question has been answered above. This only describes a fact about pricing rather than providing any assessment of the quality of connections. Neither Míla nor Valdimar provide any substantial reasoning as to how the wording may be leading.

The response to a price increase is the main subject of the SSNIP test that Míla requested from the PTA. The PTA is aware that answers to such questions must be viewed with some reservations. That is why the PTA does not rely on these answers alone, but they certainly point in the same direction as other factors examined by the PTA, i.e., that there is substitutability between VDSL and fibre-optic connections.

Eighth, Valdimar referred to price and the knowledge/lack of knowledge of consumers.

He noted that using price and minor price changes to assess markets and substitutability were more appropriate when markets were characterised by complete information, simple technology and/or homogenous products, as competition in such markets was usually mainly based on price. However, when competition was instead characterised by limited information or knowledge, price competition and product performance or quality, SSNIP price measurements (a 5% price increase over one year) were usually too limited. The price of a product that was part of a package would be even more difficult to measure.

According to slide 12 (Question 2a1), only 24% of respondents could write the name of their service plan, meaning that 76% did not know which internet service plan their household purchased. This showed the lack of knowledge on behalf of consumers/the market. It was also unclear whether these 24% had answered correctly.

To compare internet services solely on the basis of pricing when analyzing markets and competition would be more appropriate for markets where complete information was available. Slide 12 showed that this was far from the case with purchases of internet services in Iceland, as the majority of consumers couldn’t even name their service plan. The market was therefore characterised to some extent by lack of knowledge.

The survey included more examples of lack of consumer knowledge when it came to telecommunications of households, cf. the following slides:

- Slide 37: 35% of respondents did not know the type of their household’s internet connection.
- Slide 43: 34% did not know who owned and operated the connection (Míla, Tengir...)
- Slide 45: 6% of Síminn customers believed they were on the GR network, which would be technically impossible. 13% of those who said they had a Ljósnet connection claimed to be on the GR network (GR did not have copper local loops). 41% of 4G users claimed to be on landline networks (4G was a wireless solution).
- Slide 24: Only 46% had recorded the service’s monthly subscription fee, and 18% said that the question did not apply as the fee was paid by an employer. Since the majority of respondents did not know what they paid and/or the service was paid for by another party, it would be difficult to argue that the choice of service plan depended on pricing.

- Slide 30: Respondents were asked about their monthly subscription fee. 50% did not know and/or did not pay it themselves.
- Slide 18: Same results. Only 32% wrote the name of the service package.

It would have an impact, and be the subject of further research, if consumers were informed.

Price could be a rather inactive product attribute in markets characterised by the adoption of new systems/solutions, and it takes some time for the market to understand the difference between price and capacity. One of the reasons is that it takes consumers time to understand different experiences and the quality of different solutions.

Price could be a rather inactive product attribute in these markets, as this was a permanent solution and switching from one solution to another entailed costs. Slide 9 (Question 2) showed that 71% of respondents purchased internet services in a package with other services, which is likely to increase the cost of switching from one connection to another.

The PTA's position

The PTA agrees that an SSNIP question has limited significance in a market such as this. The PTA did therefore not see any reason to conduct such a test when preparing the preliminary draft, but later decided to agree to Síminn Group's request to conduct a consumer survey that included a question of this kind. The PTA bases its substitutability assessment on many factors, as has been noted multiple times.

The PTA agrees that the consumer survey shows that not all consumers are well informed about the subscription options they purchase, and even less so about the underlying connections. The PTA believes that this supports the Administration's substitutability assessment, as this shows that consumers are generally not invested in having one type of connection rather than another.

The PTA believes that the cost of switching a service provider and connection is negligible. The usual practice in Iceland is for the service provider to supply all equipment so the user will rent one set of equipment instead of another. Switching does not generally involve much trouble. Neither Míla nor Valdimar have explained what this cost of switching might be.

Ninth, **Valdimar** said that Gallup's survey showed that a majority of consumers believed fibre-optic to be much better than copper.

In its consumer survey, Gallup examined whether a copper connection may be substitutable for fibre-optic in the minds of consumers. As in the MMR survey, the data had been weighted so the sample would reflect the population in terms of gender, age and residence. The survey showed that the vast majority of participants considered fibre-optic to be a much better option for the household's internet connection than a copper connection, or 81.1%, while only 0.7% thought copper was much better. When consumers were asked whether they would choose a fibre-optic or copper connection, if they had could select either one, 89.3% said they would choose a fibre-optic connection. The Gallup survey for Míla was much more direct and simpler than the MMR survey for the PTA, as the Gallup survey directly addressed the comparison between fibre-optic and copper connections.

The PTA's position

The PTA has previously responded to a comment on this Gallup question. One of the question's flaws is that it presents undefined copper connections rather than the connections closest to fibre-optic in the chain of substitution, i.e., Ljósnet (VDSL).

Furthermore, these answers are not in line with the general behavior of consumers in the market, as a large proportion of consumers still buy copper connections despite having access to fibre-optic connections, and some of them have gone back to copper after having had a fibre-optic connection. There are also many things besides the type of underlying telecommunications network that determine consumers' choice of internet service provider, and some actually weigh more heavily when such a choice is made.

Tenth, **Valdimar** mentioned price elasticity.

Question 4 in the Gallup survey was in the spirit of the so-called SSNIP test in that the question posed was how much more inexpensive a copper connection would have to be, at a minimum, for the consumer to choose it over a fibre-optic connection. Almost half (41.8%) answered that a copper connection was out of the question and only 5.5% answered 0-24% more inexpensive, while others chose a higher percentage, most of them (22.2%) 50-74%. This study was mainly different from traditional SSNIP tests in that they usually asked if the consumer was willing to switch in the event of a 5% (sometimes 10%) price increase, as has been noted, while the price difference here was much bigger. Despite this, users did not want to transfer, which supports there not being substitutability between fibre-optic and copper.

The Gallup survey was rather short and simple, and its results indicated that a large majority of consumers did not consider fibre-optic and copper connections to be substitute products. If this vast majority of consumers received a copper instead of a fibre-optic connection, they would not be satisfied in the sense that they would still want to switch to a fibre-optic connection, meaning that the demand would still be there. If these were substitute products, the granting of one product should reduce the demand for the other (substitute) product. This should be rather unequivocal.

The PTA's position

The PTA refers to the answer above on the shortcomings of asking about undefined copper connections instead of investigating the potential chain substitution by asking about adjacent links in the chain of substitution.

In addition, the PTA does not consider the question to be presented correctly with regard to price changes, cf. Valdimar Sigurðsson's next two comments.

Eleventh, **Valdimar** said that price could be a rather inactive product attribute in markets characterised by rapid technological changes.

He said that the market was about much more than just price competition, so there was always a risk that SSNIP tests would provide an unsatisfactory definition of the market (substitution) and that this could result in a too narrow definition of markets, as there is competition in many more aspects or attributes of products than price alone. He said that this was especially true in industries characterised by rapid technological changes, where competition was mainly in performance-related attributes rather than pricing. In such sectors, companies do not only compete by lowering prices but also by developing or implementing technology to change product quality and performance in an effective manner. Calibrating competition according to

consumer reactions to minor price changes created a risk of further distorting competition in industries with rapid technological development as price was almost a neutral factor in the decision-making of a majority of consumers, as could be seen from the findings of the Gallup survey.

The PTA's position

The PTA agrees that the market involves many factors besides price so the SSNIP question, in and of itself, does not provide a decisive conclusion in the substitutability assessment. That is why the PTA bases its assessment on many other factors. The PTA reiterates that competition in the internet connection market involves the service bundles that individual companies offer to consumers and consumer behaviour may be determined by factors such as the television material that is available and the service provider's overall image. The service provider's use of advanced technology does not have to control buyers' behaviour in the short or medium term, as can be seen from the PTA's data on the use of copper connections in fibre-optic areas and the transfer of users from GR's fibre-optic network to Míla's copper network, which is detailed further in Appendix B.

Twelfth, **Valdimar** discussed the methodology in Gallup's survey.

It would have been better if an interval scale had been used in the Gallup survey as then it would have been possible to measure substitutability in the form of price elasticity or correlation of a price increase in one product increasing demand (willingness to pay) for the other (substitute) product. That would have been a better methodology but did not change the conclusion that according to the survey, the price of a copper connection could be significantly reduced without a majority of consumers choosing it, while Gallup had only asked those who had chosen a fibre-optic connection (89.3%).

The PTA's position

Here, a shortcoming in Gallup's question about the response to a price increase is pointed out. The PTA refers to its previous responses, where other faults in the presentation of the Gallup survey were pointed out. The PTA therefore considers Question 14 in the MMR survey to give a better picture of potential consumer behaviour in the event of a price increase for a fibre-optic connection while reiterating that the PTA's assessment is based on many other factors.

Míla said that it was obvious from Valdimar's results that MMR's survey for the PTA had *serious deficiencies*, as did the conclusions that the PTA drew from the survey in the consultation document. According to Valdimar's expert assessment, price of the internet service was not the dominant factor in consumers' choice of internet service provider according to MMR's survey, the survey was a poor indicator of Icelandic consumers' experience of underlying telecommunications networks, and the study did not give consumers a chance to experience differences between different services. Thus, the survey addressed purchasing behaviour, knowledge, pricing and reasons for choosing an internet service provider, which were not an indicator of the connection itself. The survey was also too long and included questions about both internet service providers and service plans, which might be somewhat confusing for the respondents. As regards the significance of price in consumer choice, he pointed out that the vast majority of consumers named something other than price as a reason. In fact, 78% of consumers first named another factor than price as one of the main reasons for their choice of internet service provider for their household.

The results of the survey thus indicated multi-attribute decision making on behalf of consumers rather than decisions being based on a single attribute, e.g., price. There were also various comments on the survey's methodology as such. There was no assessment of the total price. Furthermore, the PTA's conclusion that price is the most important factor in consumers' choice of internet service provider depended on the hidden assumption that consumers are a homogenous group, which is not the case as internet use varies according to groups. The fact that only 4% named a copper local loop as the household's telecommunications connection indicated that this was a product at the end of its product lifetime curve. The opinion also included serious criticism of the PTA's attempt to assess the price elasticity of consumers by conducting an SSNIP test in Question 14, an attempt which, according to the opinion, had little validity, in addition to which the interpretation of the data was incorrect.

The PTA's position

Above, the PTA has discussed individual items in Valdimar's report and there is no need to repeat that here. The PTA refers to its previous answers on this topic.

Mila said that it was also pointed out in Valdimar's opinion that price could be a rather inactive product attribute in markets characterised by the adoption of new systems/solutions, and it takes some time for the market to understand the difference between price and capacity. One of the reasons is that it takes consumers time to understand different experiences and the quality of different solutions. In markets where product attributes were characterised by rapid technological changes, there was a risk of an SSNIP test characterising the market (substitutability) in an unsatisfactory manner, which could result in a too narrow definition of markets, as there is competition in many more aspects or attributes of products than price alone. This was said to be especially true in industries characterised by rapid technological changes, where competition was mainly characterised by performance-related attributes rather than pricing. In such sectors, companies do not only compete by lowering prices but also by developing or implementing technology to change product quality and performance in an effective manner.

He claimed, furthermore, that calibrating competition according to consumer reactions to minor price changes created a risk of further distorting competition in industries with rapid technological development as price was almost a neutral factor in the decision-making of a majority of consumers, as could be seen from the findings of the Gallup's survey for Mila. Actually, Valdimar believed that it would have been better if an interval scale had been used in the Gallup survey as then it would have been possible to measure substitutability in the form of price elasticity or correlation of a price increase in one product increasing demand (willingness to pay) for the other (substitute) product. However, that did not change the conclusion that according to the survey, the price of a copper connection could be significantly reduced without a majority of consumers choosing it, while Gallup had only asked those who already had a fibre-optic connection (89,3%). The professor therefore concluded that fibre-optic and copper were not substitute products.

The PTA notes that Valdimar's report includes the following conclusion, not mentioned by Mila in its comments:

*"It can thus be concluded that fibre-optic and copper are not substitute products. This is much more like a case of **replacement**. The MMR and Gallup surveys show that quality (speed, service, data volume) rather than price is the decisive factor in consumer choice. This is otherwise a multi-attribute decision making process. The copper connection is far along in its product life cycle. New technology takes over: **Fibre-optic is a replacement for copper.**"*

The PTA's position

The PTA refers to its previous discussion of Valdimar's report. The PTA would furthermore like to note the following regarding his conclusions on substitutability. Valdimar concludes that according to the findings of these consumer surveys, "... *fibre-optic and copper are not substitute products. This is much more like a case of **replacement**.* (PTA emphases edit).

When examining this statement, the first thing to note is that internet connections passing through copper local loops have for years been operated and marketed in Iceland by Síminn Group under the name "Ljósnet", where the main focus in marketing has been on the connection being based on a fibre-optic connection to a street cabinet. It is therefore not the case that copper-only internet connections are used any longer, to any significant degree, so the conclusion may not be relevant as it reflects neither the connection options available to consumers nor the name under which the product has been sold (i.e., Ljósnet).

In Gallup's survey, respondents were asked to choose between a fibre-optic connection and a copper connection as a better option for the household's internet connection (page 4) and say whether they had a fibre-optic or copper connection in their household (page 6). There was no option to distinguish between a fibre-optic connection and Ljósnet or specify a mobile network connection (5G, 4G, etc.). Gallup's conclusion is that 92.5% believed that a fibre-optic connection was a better option than a copper connection, and of those who said they had an internet connection in their household, 98.4% said that they had either a fibre-optic or copper connection. When the division between fibre-optic and copper is examined, 85% said they had fibre-optic connection and 15% said they had a copper connection (calculated as the proportion of those who said they had either fibre-optic or copper).

This was measured differently in MMR's survey, where respondents were given a choice between considerably more connection options, including Ljósnet and mobile network connections (5G, 4G, etc.). Of those who gave a definitive answer, 89% said they had either a fibre-optic connection or a copper connection (Ljósnet, copper local loop or VDSL). When the division between fibre-optic and copper is examined, 69% said they had fibre-optic connection and 31% said they had a copper connection (calculated as the proportion of those who said they had a connection that was either based on a fibre-optic local loop or a copper local loop).

A closer look at the results of the MMR survey shows that of those who named copper-based connections, the majority, or 79%, named Ljósnet, 18% copper and 3% VDSL. Thus, it seems that connections that are technically based on copper are primarily known to consumers under the name Ljósnet, giving rise to the question whether the difference between surveys of the number of those who say they have a copper connection is due to some kind of confusion on behalf of respondents.

In this regard, the results of the surveys can be compared to the actual figures for the number of internet connections in Iceland. According to figures from the PTA, there were 91,221 fibre-optic network connections and 47,388 copper network connections (xDSL) in Iceland in mid-2020. The number of fibre-optic connections had increased by 12.9% from the previous year while the number of copper connections had decreased by 7.8%. This was the same development, albeit not as rapid, as the year before, when fibre-optic connections increased by 27% from mid-2018 to mid-2019 while copper connections decreased by 20.1%. To estimate the actual number of internet connections in the country at the close of the third quarter (six

months after the latest actual numbers), one can broadly assume that the change was approximately half of the change in the previous 12 months.

If the change in the number of connections is not overestimated, it can be assumed that there were 97,112 fibre-optic connections and 43,673 copper connections in the country at the close of the third quarter of 2020, at the same time as MMR and Gallup's surveys were conducted. This is equivalent to 69% of connections being fibre-optic connections and 31% copper connections as of 1 October 2020.

The fact that so many respondents in the Gallup survey, or 89%, said that they had a fibre-optic connection (16 percent more than official figures indicate, equivalent to half of all copper connections) strongly indicates that consumers have a considerable tendency to view Ljósnet as a substitute for a fibre-optic connection.

Valdimar concludes that this is not a case of substitutability but that fibre-optic connections are a replacement for copper connections, "replacement" being a product that takes over from a prior product because it has completely different attributes, works better or because another product has been discontinued. The PTA does not agree with this, as fibre-optic and copper connections have similar attributes in the minds of a large proportion of consumers, and copper connections have obviously not been discontinued, although they have decreased in number in recent years. The PTA believes that this will be the case during the term of this analysis, whatever may happen later. The PTA considers it likely that fibre-optic connections will become a replacement for copper local loops in the future, but that this won't happen during the term of this analysis.

Míla stated that they agree with the views presented in Valdimar's opinion, as appropriate, and believe that the PTA must, and is in fact obliged to, in light of Míla's comments, the principle of investigation in Article 10 of the Icelandic Administrative Procedures Act and fundamental rules of administrative law, reconsider its survey and the conclusions that the PTA drew from it in the consultation document. There is in fact, according to Míla, every reason for the PTA to use the results of Gallup's survey for Míla or, at least, conduct a new survey that would be simpler and only pertained to the items that must be examined in order to assess the factors currently under review. All rights are reserved in this regard, including at later stages.

The PTA's position

Above, the PTA has discussed individual items in Valdimar's report, including the comparison between the Gallup and MMR surveys, and there is no need to repeat that here. The PTA has also justified why the Administration believes that the MMR survey provides more conclusive indications of consumer views than the Gallup survey. The PTA refers to its previous answers on this topic.

Síminn said that it was obvious that MMR's consumer survey for the PTA could not provide a legal basis for an analysis of potential substitutability between fibre-optic and copper connections and gave several examples of how ineffective the consumer survey was in that regard.

The question in the consumer survey should have been based on a 10% price increase, as stated in the PTA's additional consultation document. In the same document, the PTA declared that packages were being examined while the question posed to the respondents did not pertain to packages including internet service but rather the internet service in and of itself. There was

therefore a disparity between the PTA's intended question and the actual question that was posed.

The survey should have informed the consumer about the services asked about in the questions rather than ask about names that not all respondents may understand. The question could have been as follows:

"If the price for a fibre-optic internet service would increase by ISK 300-600 per month, would you switch to a connection that is ten times slower?"

Copper connections in Iceland generally reach a download speed of ca. 50-100 Mb/s while fibre-optic connections have generally reached 1 Gb/s. A few years ago, the difference between connection speeds would only have been 50 Mb/s, or twofold, but is now ten or twentyfold if vectoring is not used for xDSL connections.

The PTA's position

The PTA notes yet again that the survey in question is not the sole basis for the substitutability assessment. The consumer survey was conducted primarily due to Síminn Group's requests in the preliminary draft consultation. When preparing the preliminary draft, the PTA already considered itself to have sufficient evidence for substitutability. The data gathered following the comments in question, including the consumer survey, support the PTA's conclusion but are not the only basis for the substitutability assessment.

The PTA does not believe that there is disparity between the quoted text in the additional consultation document and Question 14 in MMR's survey. It was much more natural to ask about an increase in the internet service alone than an increase in the total package purchased by the respondent. This would have resulted in an even greater increase in the amount, and more would undoubtedly have considered it likely that they would switch from a fibre-optic connection to a Ljósnet connection.

The question suggested by Síminn as a preferable option is very leading, with a reference to speed differences, which consumers are generally not very concerned about, plus the price increase mentioned in the question is too small.

The PTA has discussed the effects of speed differences elsewhere in this document as well as in the updated preliminary draft (Appendix A) and Appendix B, and there is no reason to elaborate on this point here, but in short, it has come to light that a VDSL connection is sufficient for most users and they don't have much need for the additional speed provided by a fibre-optic connection as things stand now and, according to the estimation of the PTA, for the term of this analysis.

Síminn claimed that the PTA's pricing criteria in the consumer survey was incorrect, that substitutability would be measured with a 5-10% price increase while the PTA had used an annual increase of ISK 12,000-15,000, i.e., ISK 1,000-1,250 per month. This meant that the PTA had the wrong assumption that the price of internet services would be ISK 10,000-12,500 if there was a 10% price increase, but ISK 20,000-25,000 with a 5% price increase. It was obvious that this could not be the case, as no company in Iceland charged ISK 20,000. for internet service and it did not cost ISK 10,000 either. If an access charge was added, subscription plans with unlimited internet would cost ISK 10,000-11,000, which is the most that an internet service could cost.

Hringdu's rates are ISK 6,400-9,900, including an access charge, but Hringdu's rate plan offers five different service plans, and the access charge could not be separated from the internet service. According to this, a 5-10% price increase of each subscription plan would be ISK 320-640 to ISK 495 to 990.

Nova's rates would be ISK 4,990-6,990, or ISK 8,380-10,380 if the access charge were included. As Nova does not offer copper local loops, there is obviously no substitutability. A 5-10% price increase for Nova's internet services would be ISK 250-500 or ISK 350-700, but ISK 419-838 and ISK 519-1,038 if the access charge were included. Nova had two subscription plans. Síminn pointed out that Nova's unlimited internet service via a mobile network cost around ISK 8,890 and is therefore comparable to the price that Nova charges for a fixed line connection. This refutes all claims that the pricing of fixed line and mobile network internet services was incomparable. If Nova were to increase prices by 5-10%, customers would not switch to Mila's copper connections. To say otherwise would not be credible.

Vodafone's rates are between ISK 4,490 and ISK 7,290, and three subscription plans are offered. An entrance charge of ISK 3,490 is then added. Based on only the internet service, a 5-10% price increase would be ISK 225-449 to ISK 365-729, depending on the subscription plan. If the entrance charge were added, a 5-10% price increase would be ISK 399-798 to ISK 539-1,078, depending on the subscription plan.

In Síminn's case, internet service plans ranged from ISK 5,000-7,600 (three plans) so a 5-10% price increase would be ISK 250-500 to ISK 380-760. If the access charge were added, a 5-10% price increase would be ISK 425-849 to ISK 555-1,109.

It was therefore obvious that the PTA had assumed a too high price increase and did not conduct the SSNIP test correctly. The PTA asked about a possible response if internet service prices would increase by ISK 12,000-15,000. The PTA's question did not pertain to access charges, packages or other factors, only internet service. An annual increase of ISK 12,000-15,000 for internet services would thus not be a 5-10% price increase, but a 15-30% price increase, depending on subscription plans. If the entrance charge was added, the PTA's question should have stated so explicitly, but the price increase would still have been 10-15%, which is too high.

Thus, the consumer survey had not been conducted in the proper manner and in accordance with the established tests to assess substitutability, which are based on a 5-10% rather than 15-30% price increase. The PTA had therefore not conducted a satisfactory SSNIP test.

The PTA's position

This question in MMR's survey was based on an increase of approximately 10% in the price of common subscription plans, plus access charge. Based on the average price of Síminn's subscription plans, according to the current tariff, a 10% increase is ISK 12,278 on an annual basis, and a 10% increase of the subscription plan "Endalaust" is ISK 14,448 per year. The most inexpensive subscription plans that Síminn mentions obviously do not carry much weight, as the share of these subscription plans is a fraction of the share of the companies Hringdu and Nova, which do not have a very high share of the total market for internet connections. The PTA points out that it is not possible to include Nova's mobile network connections in these calculations as they are not part of the defined market, cf. the PTA definition in the updated preliminary draft (Appendix A) and the further explanations set out in Appendix B and previously in this document.

The PTA only based its calculations on the amount that consumers have to pay to receive an active internet connection, including the line charge and rental of a network router, the latter of which is a charge item that Síminn fails to mention in its summary and which, by itself, amounts to ISK 10-11,000 per year. It would have been too broad a question to ask about an increase in comprehensive packages of telecommunications services, as that would have resulted in an increase of a much higher amount, which probably would have led to more people believing that they would switch to a copper connection. It would also have been too narrow a question to only ask about a part of the fee that must be paid to receive an internet connection by only asking about the access charge or the internet price. The PTA believes that there was no need to state specifically that the question was based on a total of these three charge items, as it must be rather safely assumed, based on the general knowledge of consumers revealed in the survey, that they do not make a particular distinction between these items. It is also worth mentioning that Síminn has begun to use the total of these prices in its promotions. It is necessary to pay the line charge to receive internet services, which must be taken into account when assessing the increase. It's also rare for consumers to use and configure their own network router. That is why the combined amount for internet services, network router rental and line charge is the most appropriate basis for the SSNIP test.

In light of this, the PTA believes that Question 14 in MMR's survey was presented in a reasonable manner and that the results give a good indication of substitutability, as far as can be determined by only an SSIP test.

Síminn considered it necessary to note that a consumer survey with a significant difference between facts and answers was obviously not valid. Numerous answers were incorrect, one example being that the number of Síminn customers who purchased package solutions was overestimated compared to the actual proportion of consumers who purchase such solutions.

In the survey, 85% of those who said they had an internet service from Síminn claimed to purchase the service as part of a package. As the PTA should know, the "Heimilispakki" is the only package solution offered by Síminn. Today, close to [...]% of those who buy internet service from Síminn have the Heimilispakki package, rather than [...]%.

About 17% of Nova's customers said they had Ljósnet although Nova only sells a fibre-optic connection to households through GR's system. Although the company may have had some copper connections after its takeover of Símafélagið, Nova does not seem to have offered such connections for sale. It was also interesting to see that 12% of customers who claimed that had a connection from GR said they bought internet services from Síminn although Síminn had not begun selling the internet service through GR's system.

Síminn could therefore not understand the purpose of the customer survey, as the majority of the answers to the questions posed to consumers by the PTA was information on which the PTA had more comprehensive details from the electronic communications companies themselves. This is a strong indication of the respondents having a different understanding of the questions than the PTA. Síminn pointed out that many of the concepts and questions were of such a nature that they would have had to be explained to the respondents in order for the answers to be considered valid. It was obvious that this had not been done.

One telling example of how incorrect the results were was that many people claimed to buy a subscription to Sjónvarp Símans, which is an open television station, available to all without

charge. There had been a question about the use of Vodafone and Síminn's IPTV, but nothing about the use of Apple TV or Nova TV, to name one example.

The PTA's position

The PTA believes that the discrepancy between the answers and the actual market situation does not devalue the MRR survey. One of the factors that the survey was intended to assess was how conscious consumers were about prices, services and the underlying carrier. It is pointed out that there is somewhat less consistency between answers and reality in the results of the Gallup survey commissioned by Míla.

The PTA does not use the survey as a basis for calculations, e.g., of the market share of companies. Such calculations are based on figures obtained directly from electronic communications companies. However, the PTA considers it useful to compare figures from the companies with the survey answers in order to assess how well or poorly consumers are informed.

As regards questions about the purchase of television services, the PTA points out that respondents could add options if they purchased any services that weren't listed. The PTA believes that some errors in the results for the purchase of particular television services will not affect the substitutability assessment. The purpose of the questions about the purchase of television and streaming services was first and foremost to examine how common it was to purchase such internet-based services and how many such services were purchased per household. One of the objectives was to examine how VDSL connections handle the services that consumers want to purchase. Another significant factor in the market analysis is how many people buy Síminn's television services, but such information can be more reliably obtained directly from the seller.

GR said that according to the consumer survey, factors such as price and the services on offer were more decisive in consumers' choice of electronic communication and internet services than the nature of the connection, i.e., whether the local loop was fibre-optic or copper. It was also clear that there was no difference in prices in the retail market depending on whether consumers purchased a fibre-optic or copper connection. This was the case with all retailers, i.e., Síminn, Vodafone, Hringdu, Nova, etc.

The PTA's position

GR's comment provides strong support for the PTA's interpretation of the results of MMR's consumer survey.

Nova referred to Paragraph 72 in the additional consultation document (under Section 4.9 on the reassessment of circumstances due to the obligation to monitor tariffs), where it was stated that a consumer survey conducted for the PTA in October 2020 had shown that a large proportion of consumers was ready to switch to Ljósnet (i.e., VDSL copper local loops) if the price of fibre-optic network packages (FTTH) was increased by about 10%. It had also been discovered that speed was generally not a decisive factor when it came to selecting an internet service. This supported the conclusion that cost-analysed connections over copper local loops could have a restraining effect on retail service provided via fibre-optic cable.

Nova said that it supported that the growth of Síminn, [...], would be realised, even though the quality of connections (speed) on offer was not necessarily the highest from Míla. This was also

an indication that there was substitutability between these internet solutions in the minds of consumers.

The PTA's position

Nova's comment provides strong support for the PTA's interpretation of the results of MMR's consumer survey.

3 Potential substitutability between copper and fibre-optic

3.1 The PTA's discussion of substitutability in the additional consultation document

38. As stated above, Míla and Síminn commented on the PTA's initial assessment that there was still substitutability with regard to copper and fibre-optic connections in Markets 3a and 3b. As stated in Chapter 2 above, the PTA commissioned a consumer survey, which was the subject of consultation and was intended to describe consumers' experience of underlying telecommunications networks, i.e., copper and fibre-optic.

39. Furthermore, the PTA decided to give the electronic communications companies that submitted comments in the previous consultation on this issue, plus the ICA, an opportunity to comment on each other's comments on this issue. However, the PTA did not give Míla an opportunity to comment on Síminn's comments, or vice versa, as the PTA believed that the separation of the companies must be observed, including separation in defense of interests, with regard to legal costs, in relation to the settlement that Síminn Group made with the ICA in 2013, and which was revised in 2015, wherein Síminn became Míla's parent company and the separation between the companies was prescribed in various ways.

40. The PTA sent the relevant electronic communications companies and the ICA an e-mail with the comments from the companies and the ICA on this matter with the exception, as previously noted, that Míla did not receive Síminn's comments nor did Síminn receive Míla's comments. The PTA did not give Vodafone, Nova or GR an opportunity to express their views on each other's comments either, as these companies all agreed that substitutability existed, and it would not be reasonable to enable them to coordinate their comments. All had a chance to express their views on the ICA's comments, as it is not a market participant. The ICA was also given an opportunity to express its views on the comments of all market participants.

41. It was noted in the additional consultation document that when the relevant electronic communications companies and the ICA had sent their comments on the consumer survey and the comments from each other, the PTA would assess them and subsequently make a final decision on whether the Administration would change its approach on this. That discussion will feature in Section 3.2 below.

3.2 Stakeholder comments on the PTA's substitutability assessment and the PTA's position on them

The ICA said that with reference to the results of the MMR survey, it could agree with the PTA's conclusions in Section 2.1 of the additional consultation document, i.e. that the consumer survey supported the PTA's preliminary draft assessment of substitutability between copper network connections and fibre-optic connections.

The PTA's position

The ICA's comments about the PTA's consumer survey and its conclusions on the potential substitutability between copper and fibre-optic connections clearly support the PTA's interpretation of the consumer survey's conclusions and its definition of service markets for internet connections and underlying wholesale factors.

The ICA reiterated its previous comment, wherein it is stated that in its retailing activities Síminn Group did not seem to have made any distinction between whether resold local loops were on a fibre-optic or copper network, not in pricing, marketing or other commercial conditions offered to end users. On the contrary, the Competition Authority had become aware that the company had made it a selling point in its sales campaigns that there was substitutability between copper and fibre-optic local loops. With regard to the retail trade in internet connections offered by Síminn and other retail companies, there seemed to be no distinction made in the price quotation between whether the service was delivered through fibre optics or an xDSL connection over a copper network. The retail price of internet connections therefore seemed to be nearly always the same, irrespective of the technology of the access system or local loops in this context.

The PTA's position

This comment by the ICA on the marketing of internet connections is consistent with the PTA's discussion on the matter and is categorically in support of the PTA's findings about substitutability between copper and fibre-optic connections and the definition of the service markets for internet connections and the underlying wholesale factors.

The ICA noted that Síminn had, in its recent communications with the Authority, particularly the request for the repeal of the 2015 agreement between Síminn Group and the ICA dated 27 February 2019, argued repeatedly that the Group's obligations pursuant to its agreement with the ICA should be repealed due to increased competition between copper connections and fibre-optic connections from GR and Tengir. In this request, Síminn defined the market for wholesale local access provided at a fixed location (inactive access) so that services in Iceland that fell under the above-mentioned wholesale market would include "*access to copper local loop, access to fibre-optic local loop and VULA access to copper local loop.*"

In the same request, Síminn defined a special wholesale market for central wholesale access provided at a fixed location (active access) or a market for so-called bitstream access. In the company's opinion, the distinction between local access and central access markets was not always clear, although the former market was a commodity market that was ahead of the latter market in the production chain. Several companies operated in the market and in Síminn's opinion, GR was the most active there, although Míla and Tengir also offered services that fell under the market for central access.

In light of the above quotations, it seems to the ICA that Síminn Group itself has defined wholesale markets 3a and 3b broadly without regard to technology and underlying infrastructure. Thus, Síminn had at its own initiative, based its communications with competition authorities on copper and fibre-optic network connections belonging to the same product or service market on both production levels, irrespective of the type of local loop, network topology or access technology.

The ICA therefore commented on Síminn's opinion that copper connections, Ljósnet and fibre-optic connections were not substitute products in the market. The ICA could not see how Síminn could distinguish between local loops used for other types of connections than internet services, e.g. for lifts, petrol pumps or PTSN, and claim that these local loop leases did not fall under wholesale market 3a. The ICA did not find that Síminn had used this kind of reasoning in its arguments up until that point. The ICA also stated that this type of local loop access depended

on the same line charge in Síminn's list of tariffs, irrespective of use, and it appeared that the same fee was quoted in Míla's list of tariffs.

The PTA's position

This comment made by the Competition Authority regarding definitions which Síminn Group has itself recently submitted, is categorically in support of the PTA's findings about substitutability between copper and fibre-optic connections and the definition of the service markets for internet connections and the underlying wholesale factors. In the PTA's estimation it is interesting to note that Síminn Group is in this manner presenting its arguments to best suit its convenience with regard to the different authorities in this case.

Míla stated that in the company's comments on the draft for the market analysis, the company had presented detailed arguments in support of the statement that the PTA's initial assessment of substitutability between copper and fibre-optic connections was inaccurate. In support of this, Míla had submitted the aforesaid report from AM. Míla was of the opinion that the PTA's findings in the additional consultation document, with reference to the further investigation conducted by the Administration, that there was substitutability between copper and fibre-optic, was also not accurate and that the consumer survey on which the PTA seemed to principally rely on to support its findings was not valid, at least not in the way in which the PTA interpreted it. Míla therefore considered its previously submitted comments on the market definition to be still fully relevant. In fact, the aforesaid Gallup findings for Míla and the opinion of Professor Valdimar Sigurðsson supported Míla's comments on the PTA's initial assessment of the market definitions for Markets 3a and 3b and the lack of substitutability between copper and fibre-optic.

With regard to the available comments from market participants, it was clear that there was a certain degree of consensus between them regarding the substitutability between copper and fibre-optic, despite the fact that they differed somewhat in their emphases. This position was not surprising, as it was compatible with the business and competition interests of these parties, and their responses had to be considered in that light. In support of substitutability, the market participants mainly referred to the following factors:

- The content and substance of the service was the same, even though the technology solutions were different.
- Users, both households and small-scale businesses, selected connections based on quality over the type of technology.
- Quality was generally good, irrespective of technology, and therefore price was a significant factor when it came to choice.
- Market participants on the retail market did not attach importance to the technology used, but rather focused on "content, data volume and price".
- Nearly all the EEA regulatory authorities had reached the same conclusion.
- The overall dominant position of "Síminn Group" on the telecommunications market had the effect that it was particularly likely that Míla's copper and fiber optics connections would be considered part of the same market and that obligations would be imposed on Míla.
- In general, Síminn did not distinguish between services based on technology.
- Marketing of Síminn's offers and services was directed equally towards those who had copper and Míla's fibre-optic connection.

- Statistical data strongly indicated that it would be an uphill battle to persuade users who had chosen the Heimilispakki offer with xDSL to switch to a fibre-optic network owned by another company than Míla.
- In areas where Reykjavik Fibre Network (Gagnaveita Reykjavíkur – GR) was the sole owner of fibre-optic cable, a large part of users would still be using services provided by a copper local loop, both by Síminn and other telecommunications companies.

It was specifically stated in the comments from the Competition Authority that service providers in the retail market sold access to local loops in the form of a line charge, and no distinction was made between fibre-optic and copper connections with regard to price, marketing or other terms. Síminn conducted its sales campaigns with the assumption that there was substitutability between copper and fibre-optic. There were indications that competition was significantly limited in the retail market for local loop access, i.e., there was little to no price competition when it came to line or access fees. Furthermore, there was no distinction made in the list of tariffs for consumers between delivery of the product by fibre-optic or xDSL connection. Retail price was therefore independent of technology. The Competition Authority was also of the opinion that the entire country constituted a single market.

Míla objected to the aforesaid comments with regard to the extent to which they were incompatible with the comments submitted by Míla, cf. the more detailed consideration that follows later.

The PTA's position

As stated above in the introduction to the comments submitted by Míla regarding the substitutability assessment made by the PTA in the additional consultation document, Míla gives a more detailed description of its views below and the PTA will respond to them in the appropriate section.

Míla referred to its previous comments on the PTA's preliminary draft, which contained a detailed argument for the PTA's initial assessment of substitutability between copper and fibre-optic connections being wrong. In support of this, Míla had submitted the aforesaid report from AM. Míla was of the opinion that the PTA's findings in the additional consultation document, with reference to the PTA's further investigation, that there was substitutability between copper and fibre-optic, was also not accurate and that the consumer survey on which the PTA seemed to principally rely on to support its findings was not valid. The Gallup findings for Míla and the opinion of Professor Valdimar Sigurðsson supported Míla's comments on the PTA's initial assessment of the market definitions for Markets 3a and 3b and the lack of substitutability between copper and fibre-optic.

Míla was of the opinion that it was important to emphasise the necessity of examining the comments from the market participants in the light of the fact that they were competitors of either Míla or Síminn, who would benefit if it was concluded that there was substitutability between the different products, as this was likely to support the PTA's assessment of the group's market power, and thereby the imposition of restrictive obligations for Míla, which would clearly have an effect on Míla's potential as a competitor in the market. It is also proper to reaffirm at this point that the imposition of restrictive obligations for a company beyond what is necessary could result in significantly negative effects for competition, progress, investment and the development of infrastructure on the market, to the prejudice of consumers. It was therefore immensely important to conduct the study with the utmost care and leave no stone unturned.

The PTA's position

The PTA has responded to Míla's previous comments on the substitutability assessment, in Appendix B. The criticism of the PTA's consumer survey, included in Míla's statement in this additional consultation as well as the accompanying documents, has also been responded to in the preceding section in this Appendix.

The PTA is aware that the statements from the stakeholders must be examined with due consideration of the fact that they may have a vested interest in the eventual definition of the market. The PTA does not specifically rely on these statements, although it should be mentioned that nearly everyone except Míla and Síminn agree with the PTA about the substitutability assessment. This includes the Competition Authority, which is the authority in Iceland that has the most general experience and knowledge in the field of substitutability assessment and the definition of markets. With regard to the statements from Míla and Síminn, they must of course be assessed with the same reservation as the statements from other stakeholders.

The PTA is of the opinion that substitutability between copper and fibre-optic connections has been examined thoroughly, and the PTA has conducted further investigations after the preliminary draft was published, such as the consumer survey, which the PTA considers to give solid indications of consumers' experience of copper and fibre-optic connections. Furthermore, the PTA has altered its plans to impose restrictions and does not intend to impose the restriction regarding cost analysis of Míla's fibre-optic local loop, which was the restriction that Míla considered the most severe with regard to investment and development of infrastructure.

Míla submitted that the findings of the available consumer surveys confirmed this development very clearly, that there was no substitutability between copper and fibre-optic connections, as the vast majority of respondents in both surveys already had a fibre-optic connection.

The attitude of users with regard to fibre-optic vs. copper was also clear in the survey that Gallup conducted for Míla, which indicated that 67% would definitely choose a fibre-optic connection, whereas 13.8% were highly likely to do so, when they were asked what they would do if both options were available to them and the cost was the same.

It was also clear from the findings of the Gallup survey on SSNIP tests that there was no substitutability between VDSL and fibre-optic cable, as 41.8% of respondents had answered that under no circumstances would they choose the copper connection, when asked how much cheaper the copper connection would have to be at a minimum in order for it to be selected. Furthermore, 22.2% seemed to be of the opinion that it would have to be 50-74% cheaper, 18.7% that it would have to be 25-49% cheaper, 11.9% that it would have to be 75-99% cheaper and 5.5% that it would have to be 0-24% cheaper. This could hardly be any clearer.

It was in fact clear from the survey findings that the competitive restraint of VDSL with regard to fibre-optic connections was little to none, and in all cases very negligible. This was also consistent with the opinion obtained from Valdimar Sigurðsson on the findings of the surveys. These findings, that there was a lack of substitutability, were consistent with foreign surveys on the same matter, cf. for example the survey that was conducted by the PTS on the Swedish market and was referenced in Míla's comments on the preliminary draft.

Míla therefore considered it clear from the findings of the survey conducted by Gallup for Míla that the insignificant, if any, substitutability that existed could never be considered to meet the requirements for substantial substitutability, which was a requisite for a chain of substitution to

exist between copper and fibre-optic. On the contrary, the findings of the survey confirmed that copper was vanishing from the market and that the chain had been broken due to the difference in the nature of the service.

The PTA's position

The PTA believes that the responses to the consumer surveys clearly do not give an accurate picture of the extent of the proportion of users with fibre-optic connections. In the survey conducted by Market and Media Research (MMR) for the PTA, 51% of respondents (61% of those who gave a definite answer) said they had a fibre-optic connection, whereas in the Gallup survey 72% of respondents gave the same answer (83% of those who gave a definite answer). However, the real numbers are that of local loops currently in use, 66% are fibre-optic cable and 34% are copper. Respondents who said they did not know what kind of connection they had constituted 17% in the MMR survey and 13.4% in the Gallup survey, and the discrepancy between the answers and the real numbers indicates that there are in fact more users who do not know what kind of connection they have. This is yet another indication that both types of local loops are equally useful to consumers.

The question in the Gallup survey about which option consumers would pick if the cost was the same cannot be considered a definite indication that there is no substitutability. The fact is that a large part of consumers still buys access to copper connections, whereof a considerable number is located in areas where fibre-optic local loops are available. In actuality there are many factors other than the type of connection that influence the choice consumers make, such as the price, the quality of the service provider, and the composition of the bundles offered. Even though respondents believe that they would opt for fibre-optic cable if faced with a choice where no other factors needed to be considered, this is not generally true in practice. In general, consumers are satisfied with the performance of copper connections, as indicated by the findings of the MMR consumer survey and are therefore not particularly likely to take action in order to change their connection, unless specifically encouraged to do so through marketing measures. The PTA finds it appropriate to reiterate that on Míla's home page the company states that copper connections meet all household requirements. Furthermore, some consumers are not prepared to change over to fibre-optic cable if this means that they will have to change to another retail business.

As regards the SSNIP questions, it is clear that there is a discrepancy between the findings of the MMR survey on the one hand and those of the Gallup survey on the other. The PTA would like to point out that one aspect of the answers is nearly identical in both surveys, i.e., that about 30% do not give a definite answer. This indicates that a large part of consumers is not informed about the difference between copper and fibre-optic connections, and that they have not considered whether one option is better than the other. If the numbers in the MMR survey⁴ were presented in the same way as those in the Gallup survey, i.e. that calculations are only based on those who give a definite answer, the findings are that about 52% think it very or somewhat likely that they would switch to an optical network (VDSL) if their internet subscription was increased by ISK 12-15 thousand per year.⁵ With regard to question no. 4 in the Gallup survey, it should be kept in mind that only those who had previously answered that they would rather choose fibre-optic cable were given the option of answering the question, which meant that

⁴ Question 14 on page 162 in the MMR survey

⁵ This percentage is calculated based on the answers of all the participants, irrespective of the type of connection they have. If only the answers of those who said they had a fibre-optic connection are considered, the corresponding percentage is just over 47%, see the MMR survey, page 164

33% of the participants in the survey were excluded from answering. This question is therefore not at all indicative of the general attitude of consumers.

The PTA does not consider the MMR consumer survey in any way to indicate that VDSL service constitutes little competitive restraint. Answers to SSNIP question no. 14 and questions about what determines the choice of service provider strongly indicate that consumers base their choice on other factors than the type of connection. With regard to the opinion submitted by Valdimar Sigurðsson, his findings are not complete one way or the other. Among other things he confirms the PTA's understanding that consumers are not much informed about the type of connections they are purchasing, and this must be considered to indicate that they do not generally make a distinction between fibre-optic cable and VDSL. Regarding the PTS's survey of the Swedish market, see the PTA's deliberation in Appendices A and B wherein it is stated that conditions in Sweden and Iceland are not comparable due to the limited supply of VDSL in Sweden.

The PTA is of the opinion that it is not possible to base the substitutability assessment on the Gallup survey, e.g., due to the flaws described above. The MMR survey supports the PTA's substitutability assessment, although it has to be kept in mind that the substitutability assessment is based on many factors, not exclusively on the responses from consumers. In addition, the PTA believes that reports and market participants surveys that are conducted for a fee must be taken with a great deal of reservation. For example, the PTA has no grounds for determining what communication passes between the buyer and seller during the preparation and completion of such reports or surveys. The PTA would also like to reiterate that a draft of the questions in the PTA's consumer survey was included in consultation with market participants and was referred to the Competition Authority before the survey was launched.

Míla stressed the fact that the quality was not the same for copper and fibre-optic cable and stated as an example that the speed of internet service provided by fibre-optic cable was many times that achieved with copper connections. As clearly indicated by the Gallup survey conducted for Míla, it was the assessment of the majority of respondents that fibre-optic cable was a more suitable option for them than copper, and that these were not comparable products nor was there a chain of substitution between them. Míla furthermore emphasised the reservation stated in the aforesaid deliberation regarding flaws in the PTA survey and the conclusions drawn from its findings, as the findings did not indicate that the relevant parties were prepared to switch from fibre-optic cable, which most respondents had, to another type of service. It was likewise inevitable that the findings to the effect that respondents were in general content with the quality were interpreted to indicate and illustrate the fact that the vast majority of respondents already had fibre-optic cable and therefore the best quality.

The PTA's position

The PTA points out that the consumers' experience in many cases is determined by the quality of the equipment in the relevant person's home, for instance wireless networks can create a bottleneck that causes the increase in speed that should be achieved by fibre-optic cable does not materialize and therefore the difference between VDSL and fibre-optic cable is not necessarily that great all things considered.

A question in Míla's consumer survey poses two options for respondents but does not really go into what will be convenient or sufficient for users with regard to their intended use with the connection. The MMR survey conducted for the PTA includes questions regarding various factors connected with the way in which connections can be of use to consumers and what

limitations they have encountered. The findings from those questions indicate that the consumers who have copper local loops are in general content with the functionality of the connections and only a small part of users considers them not to function properly, e.g., with regard to streaming services, and a number of respondents answer this in the same manner with regard to the functionality of fibre-optic connections.

The MMR survey differentiates between answers depending on the type of connection the consumers reported to have. It is therefore easy to see that 47% of respondents who have fibre-optic connection are prepared to switch if the price increases (Question 14). Also, that 72% of users with VDSL (Ljósnet) feel there is no lack of capacity when many streaming channels are running at the same time, and 6% more say they do not know, which means that the vast majority of such users have no complaints about the capacity of VDSL connections (see question 7c, page 65). The same applies to the itemised findings from question no. 9 (pages 82-102), wherein it is stated that consumers' experience of VDSL service is positive in general.

Míla objected to the same pricing for internet connection and access, such as in bundles, supporting the claim that this was the same market. In this regard reference was mainly made to Míla's comments on the preliminary draft, regarding that a reduction in the price of copper would not result in interest among end users to switch from a fibre-optic connection to VDSL, and also to the available findings from the Gallup survey that was done for Míla, which confirmed that [...], cf. also the above discussion on the limited significance of price elasticity on markets such as these. Míla therefore reiterated its previous views that no evidence existed that supported the claim that the pricing of service provided by copper constituted a competitive restraint for fibre-optics, rather the opposite.

Míla surmised that the fact that Síminn seemed to price the product in the same manner by the underlying networks and did not place any particular emphasis on the marketing of either product, was probably for a reason that could be easily explained. This was that there was no purpose in pricing copper lower than fibre-optic cable, because copper was on its way out of the market and the users who already had fibre-optic connection for internet would not switch to copper unless Síminn would practically pay for them to select that product, which would obviously not be a viable option. Also, there were other factors besides price that were more important to users when they made their choice. It was also proper to reiterate the previous comments from Míla concerning the way in which Míla's competitors had in their marketing material emphasized this significant difference in the service in their communication to end users.

The PTA's position

The PTA considers that Míla is not correct to conclude that the same pricing of internet connections by copper and fibre-optic cable is no indication that the connections belong to the same market. One of the defining points of a service market in accordance with the EU Commission notice on the definition of markets of 1997⁶ is precisely the pricing of the service, see Paragraph 7 of

“A relevant product market comprises all those products and/or services which are regarded as interchangeable or substitutable by the consumer, by reason of the products' characteristics, their prices and their intended use.”

⁶ COMMISSION NOTICE on the definition of relevant market for the purposes of Community competition law (97/C 372/03).

According to the Notice, it is in most cases necessary to base a decision regarding the definition of markets on many evaluative factor and multiple evidence (paragraph 25). Among the defining factors are the following:

- Characteristics of the product and the intended use
- Data on substitutability in the near future
- Various quantitative tests, such as with regard to price trends and the effects thereof
- Viewpoints of customers and competitors
- The wishes of consumers
- The obstructions and costs involved with changing the service
- Different user groups and difference in price

Thus, price is only one factor of many that need to be examined when defining service markets. These factors must be examined in the proper context, and it is stated among other things in the Commission notice that the findings of surveys regarding what occurs upon a price increase of 5-10% must be taken into account, if they are sufficiently supported by facts (paragraph 40).

The PTA previously described the flaws in the Gallup survey that was done for Míla. The PTA considers it more appropriate to be guided by the findings of the MMR survey regarding the potential behaviour of consumers in the context of an increase in the price of fibre-optic connections, which indicated that a large part of consumers were prepared to switch from fibre-optic cable to VDSL if the price of internet offers with fibre-optic cable increased.

The findings of the surveys must be examined with reference to actual cases of customer behaviour, and the PTA has demonstrated instances where consumers switched from fibre-optic cable to VDSL. Still, such behaviour is not directly connected with increase in the price of fibre-optic cable, but rather that consumers seek out the retail service that is offered for copper connections or choose to do business with one particular service provider rather than others. Yet this behaviour clearly demonstrates that consumers do not focus solely on the underlying carrier when selecting service providers, and that they are prepared to switch between types of connections in either direction.

The PTA points to the aforesaid comment from the Competition Authority, wherein it is stated that in its retailing activities Síminn Group did not seem to have made any distinction between whether resold local loops were on a fibre-optics or copper network, not in pricing, marketing or other commercial conditions offered to end users. On the contrary, the Competition Authority had become aware that the company had made it a selling point in its sales campaigns that there was substitutability between copper and fibre-optic local loops. With regard to the retail trade in internet connections offered by Síminn and other retail companies, there seemed to be no distinction made in the price quotation between whether the service was delivered through fibre-optics or xDSL connection through a copper network. The retail price of internet connections therefore seemed to be nearly always the same, irrespective of the technology of the access system or local loops in this context.

Furthermore, it cannot be seen that Míla draws any attention on its home page to the vastly different experience that consumers are meant to derive depending on whether they choose copper or fibre-optic cable, as the company claims herein. On the contrary, it is indicated there that connections through copper will meet every household requirement.

Having considered all the aforesaid, it is the opinion of the PTA that the same pricing of service through fibre-optic and copper connections is a clear indication that the connections belong to the same market.

Míla pointed out that the wholesale price offered to telecommunications companies was not the same for copper and fibre-optic cable, for instance Míla's price for fibre-optic connections was 35-80% higher in wholesale than the price for copper connections (local loops and bit stream). However, the telecommunications companies opted to sell products and/or make offers with these two different types of connections available to consumers for the same price. The result for the telecommunications companies was therefore that the margin was lower by ISK 800-1800 for each product or offer involving fibre-optic or copper connection. If there was full substitutability between copper and fibre-optic cable, like the market participants seemed to claim in their submitted statements, and price was the most important factor determining consumers' choice of service, it might be considered that there were great opportunities for the telecommunications companies to market copper, as it was priced lower in wholesale than fibre-optic cable. In other words, the telecommunications companies could market it specifically as a cheaper alternative for users while simultaneously lowering the retail price, and thereby gain more customers with the same margin they would get from retailing fibre-optic cable. Yet none of the telecommunications companies seemed to regard this as viable option or achievable, and Míla considered the reason to be evident, i.e., that end users did not believe there was substitutability between the two options and that it was not cost-effective to launch specific marketing efforts to promote copper. This was consistent with the findings of the Gallup consumer survey conducted for Míla, which indicated that the price increase that apparently was required in order to get users to switch from fibre-optics to copper was far beyond the benchmarks of the SSNIP test, and also inconsistent with the aforesaid opinion submitted by Professor Valdimar Sigurðsson.

In fact, all the telecommunications companies made considerable investments in order to persuade users to switch from copper connections to fibre-optics in their sales efforts. Thus, they invested heavily to get a lower margin from each customer, by getting them to switch from copper to fibre-optics. This indicated even further that the telecommunications companies considered the speed and quality of fibre-optic connections to be what consumers wanted, and also that there was no substitutability between copper and fibre-optic connections.

It may also be pointed out here that GR had significantly raised its price for fibre-optic cable in recent years, i.e., by 26% between the years 2017 and 2020. This fact did not seem to have had any effect on the telecommunications companies' desire to transfer customers to a cheaper solution, such as Ljósnet. The same could be said for Tengir, which had also raised its price considerably, yet in spite of that the number of customers who chose Tengir's fibre-optics had vastly increased. Tengir collected its fee directly from users, and therefore it could be said that the direct response from users with regard to the pricing was obvious. Also, it might be mentioned that Nova had neither offered Ljósnet connections on its website for the Capital Area nor in any other place, which had to be an indication that Nova did not consider copper and fibre-optics to belong to the same market. The telecommunications companies emphasized these points to further their business interests, based on their customers. This clearly supported that they believed the speed of the fibre-optics to be the by far the most important factor influencing the choice made by consumers, not the price.

The PTA's position

It is true that the wholesale price of copper lines from Míla is lower than that of fibre-optic cable. However, the list of tariffs is arranged in another way and various ancillary costs can apply when copper connection is leased, such as initial charges, access to distribution frames and regenerators for ADSL. It has also been a long time since the PTA last approved cost-analysed prices from Míla for copper connections, and now the PTA has called for a new cost analysis from Míla, which the company is to submit no later than on 1 June of 2021. It is likely that prices will then increase for copper connections, among other things because of less use, which would mean that there would be a downswing with regard to the price for copper and fibre-optic connections.

The fact that Síminn's competitors in the retail market prefer fibre-optics to copper connections might be explained by a variety of reasons. One reason could be that the companies prefer to do business with parties other than Síminn Group, when possible, as these companies are in fierce competition with the retail arm of Síminn Group. It may be that they wish to avoid adding to the group's strength by doing business with it, if other options are available. There may also be more trust towards other wholesale suppliers, who only offer fibre-optic cable. The companies may wish to focus on one technological solution where this is possible, as this is in many ways a simpler and more cost-effective approach. It is also anticipated that copper connections will be replaced in the course of time, and therefore the companies may be responding to such future developments by choosing fibre-optic cable. The reason may not be what Míla maintains, i.e., that end users do not think there is substitutability between copper and fibre-optic connections, as most indications point to users not being overly concerned about the underlying carrier for connections. As there are many other determining factors besides the attitude of consumers when it comes to these companies' choice of connections, it is not a simple task, as Míla maintains, to increasingly switch to copper local loops in order to achieve better performance or market more inexpensive connections.

Míla's copper connections accounted for 36,3% of the total number of local loops that were in use on the market, and 20,5% were fibre-optic local loops at the end of the year 2020. In light of the vast extent of copper local loops it cannot be seen that the group would have retained its strong position on such a homogeneous market if there was no substitutability between copper and fibre-optic local loops.

Síminn is the largest buyer of copper local loops and the company, like Míla, has upheld the view in marketing that VDSL connections are a substitute product. A reduction in the price of such connections may have an effect on that view. Síminn has the market power to sell such connections at a high margin and has no reason to enter into a price war with other internet service providers.

This supports the PTA's conclusion that consumers do not distinguish between fibre-optic and copper connections as belonging to different markets and Síminn and other retailers of internet services can price them in the same manner through line charges, and benefit from a higher margin on the copper connection. This is in line with the principle of pricing in marketing that price shall mostly be determined by the consumers' assessment of the worth of the product and their will to pay for it, not by the underlying cost. The margin is then determined by the company's ability to manufacture the product at such cost that the margin is acceptable.

Míla stated that in light of GR's reference to the situation on Seltjarnarnes, Míla considered it proper to give a brief description of the behaviour of consumers in that specific area. It was

clear that GR had installed fibre-optics for the entire community quite a few years ago, and that there had been comparable increases for GR's fibre-optics in that area like in other places. Míla offered VDSL with a speed of 100 Mb/s for nearly all apartments in the town. However, Míla's share in xDSL had changed from [...] % in the year 2013 to [...] % in November of 2020. This further supported that there was no substitutability between copper and fibre-optic cable.

Míla also submitted a memorandum on the development of the share of xDSL connections in Seltjarnarnesi between 2013-2020. Therein was indicated that the latest population figures were based on the fact that 1,727 apartments had been registered in that town in December of 2019. As aforesaid, Míla's xDSL share had dropped from [...] % to [...] % between 2013 and November of 2020. Míla had [...] xDSL connections in Seltjarnarnes in November of 2020, part of which might be supplied to companies. Therefore, it could be said that the aforesaid share was a maximum indication and much lower in reality.

The following figure illustrates that the xDSL market share had dropped rapidly in 2017, which was consistent with the fact that there was an actual increased need for more bandwidth in households beyond 100 Mb/s. [...]

The PTA's position

The PTA is of the opinion that although these statistics provided by Míla may be mostly accurate, they nevertheless indicate that a substantial proportion of users believe that there is substitutability between fibre-optics and VDSL. In a community where everyone has had the option of fibre-optics for more than a decade, roughly a [...] of users are still on a copper network. This is such a significant share that it clearly indicates that consumers are not primarily thinking of the carrier when they choose their internet service provider. Also, the PTA does not see that a decrease to from [...] % to [...] % in 7 years is sufficiently extensive or rapid to support Míla's case.

Míla also referred to the memorandum on the situation in Bakkafjörður. In that community, 45 apartments were registered. In 2019 Míla had sold [...] xDSL connections in that town. The vast majority had used VDSL connection with a speed of 50 Mb/s. Fibre-optic cable had been connected into houses in Bakkafjörður and sales began in November of 2019. In November of 2020, i.e. one year later, [...] % of bit streaming connections were on fibre-optic cable and [...] % on xDSL connections. Of the 45 apartments in Bakkafjörður, [...] had decided to pay the initial charge of ISK [...] to be able to use fibre-optics. The owners of other apartments had the option to pay the initial charge later in order to obtain fibre-optics. Míla referred to the following image: [...]

Considering the aforesaid, it was clear that a vast majority of inhabitants in Bakkafjörður had been prepared to pay large sums in order to get fibre-optic service instead of VDSL with a speed of 50 Mb/s.

The PTA's position

Even though the majority of inhabitants in Bakkafjörður had opted to switch to fibre-optics from Tengir, a third of them still uses xDSL. A substantial part of consumers therefore considers internet connection through xDSL to be satisfactory. It is understandable that in an area where xDSL has a speed of 50Mb/s and under, more people would be of the opinion that there was not complete substitutability between copper and fibre-optics, as opposed to areas where 100Mb/s VDSL is available to everyone. This may be the explanation for the rapid development that followed the installation of fibre-optics in Bakkafjörður. The PTA has not claimed that

there is complete substitutability between the lowest performance xDSL connections and fibre-optics connections, rather it considers that there is a chain of substitution where there is substitutability between the types of service that are closest to each other with regard to speed. The PTA also does not consider it unlikely that the large majority of the residents in Bakkafjörður were planning for the future by obtaining a fibre-optic connection to their homes at an early stage as the price was lower for those who got the connection at once (ISK 100,000) rather than ordering this type of connection for their home at a later stage as this would mean substantially higher start-up costs and uncertainty as to the implementation. There is therefore a strong incentive to take advantage of the comprehensive roll-out of fibre-optics which is implemented in a targeted manner with the availability of government grants. It is reported on the Langesbyggð news website that there was good participation in this project among the residents of Bakkafjörður⁷ and the local consumers are faced with the choice of taking part in a specific initiative or not.

Míla objected to the statement included in the comments from GR to the effect that in areas where GR maintained fibre-optic cable and Míla did not, a large part of consumers would still opt to get service with copper local loops, both through Síminn and other telecommunications companies on the retail market. Objection was made to the aforesaid statements from GR, with reference to Míla's comments on the preliminary draft, regarding the immense decrease in the number of new customers choosing copper in such areas, and the findings of available consumer surveys. [...] For this reason Síminn had made an agreement with GR regarding access to the fibre-optics and bit stream service of GR to be able to address this situation, despite the fact that the service was considerably more expensive, as Síminn was presumably of the opinion that the choice of consumers was determined by speed and quality, not price.

The PTA's position

The PTA has addressed this subject in many places in the updated preliminary draft (Appendix A), Appendix B and in this document. In spite of the decrease in the number of copper connections there is still a substantial number of users that still buy them, including in areas where fibre-optics are available. As previously noted, the PTA has estimated that copper connections will still be used somewhat extensively during the term of this analysis, even though they are decreasing in number. Síminn has always had the option of negotiating for access to GR's bit streaming service, yet the company has not made use of this option for negotiations until recently. Furthermore, Síminn has not yet made such an agreement with Tengir, despite the repeated requests from Tengir to that effect that have been going on for a long time.

Míla objected to the statement that the group's position on the market could in any way have an effect on the market definition in this regard, or that it could be considered a criterion for the assessment of the definition of markets if the user of household offers of xDSL were "reluctant" to switch to fibre-optics network owned by a party other than Míla. Míla could not see that there was anything to support these claims, i.e., that this supported substitutability between copper and fibre-optics. It should also be considered that there could be a great many other reasons behind the consumers' decision to select a specific service provider rather than another, other than the substitutability between the two options, such as the goodwill enjoyed by the relevant service provider, the quality of the service, supply etc. The discussion in Professor Valdimar Sigurðsson's opinion was also cited in this regard. It should also be kept in mind that Síminn had now entered into an agreement with GR regarding bit streaming service and consumers

⁷ <https://www.langesbyggd.is/is/stjornsysla/frettir/frankvaemdir-vid-ljosleidaralagningu-vid-bakkafloa>

would thus be free to make their own choice in this regard, just like at various locations in the country. However, Míla was not particularly aware of the subject and content of this agreement apart from what had been publicly stated.

The PTA's position

The PTA does not base its market definitions on the market power of Síminn Group. What is being pointed out is that users generally consider VDSL connections to be adequate for normal household use of an internet connection with all the possibilities offered with regard to such connections, such as various types of streaming services. Míla also does this on its home page, and in addition Síminn has not conducted any marketing that makes reference to the difference between copper and fibre-optic connections which Síminn Group now claims vis-a-vis the PTA. In this context it may not be of great import to pinpoint the reason for the choice of service provider. What is very important is that consumers do not feel themselves obligated to update their connections from VDSL to fibre-optics.

Míla seemed to consider that in the PTA's initial assessment sufficient attention had not been given to the cost involved for end users who opted to switch their service from fibre-optics to copper, and Míla was of the opinion that consumers would find this cost and the logistics necessitated by switching the equipment to be deterring.

The PTA's position

Míla does not state what the aforesaid cost of switching might be. It cannot be seen from the marketing efforts of Síminn with regard to internet connections that a specific initial charge was collected when a business relationship regarding VDSL connections was established. In most cases, indoor utilities for copper connections remain installed and it cannot be seen that a great deal of logistics will be involved with replacing terminal equipment which most consumers lease from their service provider.

Míla, pointed out, to illustrate the importance which users attached to fibre-optic connection over other factors, something which the PTA would have to take into consideration, that users were prepared to receive fibre-optic connections for an initial charge. In Bakkafjörður and Kópasker, where the optical network was installed, nearly all users had paid the ISK 100,000 initial charge to get fibre-optic connection. In Akureyri, Dalvík, Ólafsfjörður and Ísafjörður, thousands of households had paid the initial charge to get optical network connection. In this regard it is also worth mentioning the great emphasis which municipalities placed on fibre-optics installation, such in the Westman Islands, the town of Snæfellsbær, Grundarfjörður, Fjarðabyggð and Stykkishólmur. These were places that had the optical network and suddenly came to the conclusion that it was necessary to have fibre-optics, and therefore differed from the PTA's opinion, which maintained that speed was not that important, but price was.

The PTA's position

It is government policy to achieve fibre-optic connection for all of Iceland no later than 2033. The PTA has emphasized that during the time of validity of this analysis the copper connections will remain in place and compete with fibre-optics in the areas where both types are available. As previously noted, it is natural that consumers feel a greater need to change their connection where xDSL connections of the fastest type are not available. It was mentioned earlier that the consumers of Bakkafjörður were faced with the choice of paying an initial charge of ISK 100,000 or a substantially higher amount later if they decided to choose fibre-optics rather than VDSL at a later stage. The same is true for consumers in Kópasker which probably explains

why the vast majority of residents opted for the fibre-optic cable. This does not mean that all consumers are prepared to pay a high initial charge for switching to fibre-optics. The PTA points out that even though some consumers might consider lower-speed xDSL not to be comparable with fibre-optics, this does not exclude the possibility of a chain of substitution, which does not entail that all types in the chain can be used as substitute service for each other.

Míla said that therefore all this pointed in the same direction. Consumer surveys, expert opinions, and not least the actions taken by those involved with the market (retailers and end users) clearly suggested that there was no substantial substitutability between copper and fibre-optic cable. Also, that the PTA had the burden of proof when it came to establishing the opposite, as there were restrictive obligations being placed on Míla. Míla reserved all rights in this regard, cf. also the decision of the Supreme Court of Iceland in case no. 111/2014, The Competition Authority and the Icelandic State v. Vífilfell hf.

The PTA's position

The PTA has submitted data that demonstrate substitutability, including the MMR consumer survey and various statistical data on the market and the behaviour of telecommunications companies and consumers. The PTA simply does not agree with Míla's interpretation, which is supported among other things by data that is specifically compiled for Míla with the goal of establishing and supporting certain hypotheses of the company regarding the definition of the service market. According to the EU Commission notice⁸ (paragraph 41) any surveys that interested parties arrange to have made ad hoc for issues concerning competition shall be taken with a certain degree of reservation. The PTA presented arguments earlier to support why the institution considers the MMR survey to give a better indication of the attitude of consumers than the survey which Gallup conducted for Míla. The PTA also reiterates that a draft of the questions in the MMR consumer survey conducted for the PTA were submitted for consultation to the market participants, in addition to which the PTA sought the advice of the Competition Authority while it was being prepared, and the Competition Authority is vastly experienced when it comes to the implementation of such surveys and their application in the various markets.

The PTA furthermore considers the statistical data to strongly indicate that a considerable part of consumers is of the opinion that copper connections can be a substitute product for fibre-optic cable. See the above discussion in this regard.

The PTA considers the aforesaid court decision to have no meaning with regard to the PTA's market analysis, as the PTA has submitted various data in support of its case and made reference to this data in an adequate manner.

Míla said that in light of all the aforesaid, the company considered there to be every reason and also in accordance with the PTA's statutory obligations for the institution to subject its assessment of the substitutability between fibre-optics and copper to further scrutiny.

The PTA's position

The PTA considers the assessment of substitutability in the preliminary draft to have been satisfactory in actuality. Nevertheless, the Administration embarked on additional data collection to a substantial extent following the consultation on the preliminary draft. More

⁸ COMMISSION NOTICE on the definition of relevant market for the purposes of Community competition law (97/C 372/03)

detailed and newer data were obtained from the telecommunications companies and the consumer survey that Míla considered important was performed.

The PTA therefore considers the matter to have been adequately investigated.

Síminn stated that the PTA had no data that would refute the fact that consumers were not switching from fibre-optics to copper to the extent that a 5-10% price increase on the part of the economic operator would be non-remunerative. Síminn pointed out that the question was not whether the price increase would result in fewer customers who used copper connections switching to fibre-optics, but rather the opposite. Speculations on why everyone had not already switched from copper to fibre-optic cable were irrelevant to such issues of contention as whether copper or fibre-optic cable were parts of the same market. The question was of an economic nature, and inherent in it was a certain degree of analysis of what would happen if the price for fibre-optic cable was raised by 5- 10% and whether such price increase would be non-remunerative. The answer to that question was that customers would not switch to copper connections, neither consumers nor telecommunications companies.

The PTA's position

The PTA has submitted a consumer survey that indicates that a large part of consumers would be prepared to switch to Ljósnet (VDSL) if the prices of service by fibre-optic local loop was increased. The question posed in the PTA survey was therefore not if users would switch from copper to fibre-optics, as Síminn seems to suggest.

The PTA also has various statistical data that illustrate the actual behaviour of consumers, as well as data on marketing and the conduct of telecommunications companies. Among them are figures on the reduction in use of fibre-optic networks in areas where only one fibre-optic network exists.

The PTA would like to reiterate that the assessment of substitutability is not restricted to the SSNIP question alone. This is an integral assessment of many factors. Professor Valdimar Sigurðsson precisely points out that the SSNIP question may be of little use in such a complex market as telecommunications are in the minds of consumers, and also specifically references the multi-attribute selection process. In this regard it is significant that a part of users sees no reason to switch from copper connection to fibre-optic cable, in addition to which a large part of them does not seem to appreciate any difference between these underlying networks. Consumers seem to consider first and foremost the factors relating to their experience, such as price, bundles, television content, the quality-of-service providers and loyalty to specific service providers, the data volume included etc. However, a significant number of them also mention the speed of the connection, but as previously noted, this is a multi-attribute selection process for consumers that will determine their eventual choice.

Síminn stated that it would be a simple task to ask Nova or Vodafone why the companies had not transferred their customers to cheaper copper connections when GR last increased its pricing. The most likely explanation was that the companies did not consider there to be substitutability between copper and fibre-optic cable, and that consumers did not wish to switch from copper to fibre-optics. It would have been more honest for the companies to simply admit to this, as the data on their conduct was pretty conclusive in the PTA's statistical reports. Certainly, the PTA vividly recollected GR spending millions of ISK on an advertising campaign a few years ago, which included an explanation of the basic difference between copper connections and fibre-optic connections.

It should also be clear to the PTA that copper local loops were being replaced with fibre-optic cable in most parts of the country. For example, Nova had not shifted its demand to copper even though GR had raised the price of fibre-optic connections. Nova had increased the number of its fibre-optics connections, which meant that GR's 5% price hike was remunerative and that copper connections could not prevent such an increase in price from happening. If, for example, GR would increase the price of fibre-optic cable by 10%, i.e., by about ISK 260, it was clear that Nova would not switch its customers to copper and announce that its customers would no longer have the fastest connections available, but rather ones with ten times less speed.

The proportion of Vodafone's fibre-optic connections had steadily increased, which meant that Vodafone had not shifted its demand to copper, even though GR had raised its price. The same could be said about Hringdu.

Síminn also did not switch its customers to copper, despite the fact that Míla raised its price for fibre-optics. Even though GR offered fibre-optics at a higher price than copper connections, Síminn had decided to negotiate with GR, including about transferring customers who had a copper connection to GR's system, and the general option to offer the customers on GR's systems Síminn's internet service.

The PTA's position

Like the PTA has described above in relation to the comment submitted by Míla, it can be for many reasons that Síminn's competitors on the retail market prefer to buy fibre-optic connections from GR rather than copper connections from Míla, where these two options are available. See the aforesaid discussion above.

With regard to marketing, GR has emphasized the speed of fibre-optics, whereas Síminn has made no distinction between copper and fibre-optic connections in its marketing efforts. The sellers' marketing of their products is therefore not a definite indicator of substitutability.

Síminn also pointed out that a 5-10% increase in the price of fibre-optics would not result in telecommunications companies entering the market with offers of copper connections. This surely was a point that was not in dispute.

The PTA's position

The PTA agrees that an increase in the price of fibre-optics alone cannot lead to a new participant entering the market to offer copper local loops on the wholesale level. This is probably mostly explained by the fact that fibre-optics are the technology that will eventually replace copper connections. It would therefore not be a sensible long-term investment to install a new copper system that might become obsolete within 10 years, and the natural depreciation time for such investments is much longer. This *alone* does not prevent that copper connections may be considered a substitute product during the time of validity of this analysis, as many other factors besides supply-side substitutability need to be considered.

Síminn stated regarding the SSNIP test that substitutability was assessed in the following manner:

„The question to be answered is whether the parties' customers would switch to readily available substitutes or to suppliers located elsewhere in response to a hypothetical small (in the range 5 % to 10 %) but permanent relative price increase in the products and areas being considered. If substitutability were enough to make the price increase unprofitable because of the resulting loss of sales, additional

substitutes and areas are included in the relevant market. This would be done until the set of products and geographical areas is such that small, permanent increases in relative prices would be profitable.“

The PTA had not implemented this test. However, there was data available that could shed light on whether substitutability existed or not, i.e., the telecommunications companies' reactions to alterations in the price of fibre-optic cable. There had recently been increases in the price of fibre-optics networks on the part of GR, Míla and Tengir and similar companies. The price changes made by these parties could be compared with the subsequent demand among telecommunications companies for copper connections, and thereby it would be revealed what products were substitutability products. The price for copper local loops (ADSL/VDSL) had last changed on 1 June 2019, to ISK 1,558, whereas before that time the price had been ISK 1,406. This price had remained the same for about 2 years. Síminn's copper connections through Míla's network had not increased in number, even though the price of copper connections had remained the same during the time when the price for fibre-optic cable had gone up.

The PTA's position

The PTA has implemented such a test on consumers' attitudes. With regard to the behaviour of telecommunications companies as buyers on the wholesale market, there is a myriad of reasons behind the fact that the companies tend not to lease copper local loops from Míla if other options are available. See the above discussion in this regard. Therefore, the kind of test proposed by Síminn would not be a reliable indicator of the substitutability of copper connections. The PTA also points out that Míla has submitted a new cost analysis for copper connections in the relevant markets, and the cost-analysis prices for copper will most likely increase according to that analysis, among other things due to less use of that network and general increase in underlying cost.

Síminn stated that the fact was that copper local loops were being replaced by fibre-optics and that there simply existed certain limitations as to the rate at which connections could be replaced. It made little sense to switch a customer from fibre-optic cable to copper local loop if the price of fibre-optic local loops was raised by 5-10%. The customer most likely would be none too pleased and probably seek to do business with another party who offered fibre-optics. GR had regularly raised the price of fibre-optic local loops during the period when the price of copper local loop had remained unaltered. If the PTA's idea that there was substitutability between fibre-optics and local loops proved to be correct, GR's price increase should have led to business shifting from fibre-optic local loops to copper local loops. This had not occurred and therefore the PTA's idea was not correct.

The PTA's position

The PTA refers to the reply given earlier. The PTA has demonstrated that a large part of end users is prepared to switch from fibre-optics to VDSL. Nevertheless, other factors have prevented Síminn's competitors on the retail market from taking this course of action. Among the data in the PTA's possession are data from GR that indicate a significant trend of customers switching from GR's fibre-optic network to Míla's optical network (VDSL) in recent years, and this development is still ongoing.

Síminn stated that in addition to the consumer survey which the PTA arranged for MMR to carry out on its behalf, and which had been discussed in the comments submitted by Síminn as described above, there could be no legal grounds for analysing whether there was substitutability between fibre-optic connections and copper connections, and that it was clear

that the comments submitted by Vodafone, Nova and GR regarding the PTA's preliminary draft were not consistent with the companies' actions and the development of the market.

The PTA's position

The PTA considers the MMR consumer survey to be a useful contribution when it comes to the assessment of substitutability and along with other assessment factors it provides a foundation for the PTA's conclusion that copper, and fibre-optic local loops belong to the same service market. This survey is discussed in more detail in Section 2.

The actions of Síminn Group's competitors are determined by various other factors besides the substitutability of copper with fibre-optics, and therefore there does not have to be complete harmony between their actions and the comments on the definition of the market. The PTA is aware that it seems that the market will be dominated by fibre-optics in the future, and the PTA has elaborated that according to the available information it is most likely that a substantial amount of copper local loops will still be in use at the end of the term of this analysis.

GR stated that as the company had pointed out in the comments on the PTA's initial draft and the subsequent answers provided to the PTA, the extent of GR's customers (consumers) who switched from GR's fibre-optic network to Mila's copper network was in the opinion of GR an indication that Síminn and the customers regarded copper local loops as a substitutability product/service for fibre-optics used for delivering the telecommunications service which Síminn, and in some cases other parties, was selling to customers (consumers) on the retail market and that it could deliver the service provided without impairing the supply of services delivered by it. This was consistent with the statement from the Competition Authority in the additional consultation process, where reference was made to Síminn's marketing of services to the effect that there was substitutability between fibre-optics and copper local loops. In support of this it was also pointed out that the line charge was the same irrespective of the mode of delivery of the service.

The PTA's position

GR's comment supports the PTA's substitutability assessment. Data which GR has submitted to the PTA indicates that users would be quite willing to switch from fibre-optic local loop to VDSL in connection with purchasing retail services offered by Síminn, and in fact had been doing so to a considerable extent.

GR stated that the analytical work which the PTA had embarked on with the consumer survey which MMR had performed for the institution, and was made public on 27 October 2020, indicated even further that there was substitutability between copper and fibre-optic local loops. GR had perused the findings of the survey and summarized some of the points which the company considered to be key factors with regard to the competitive environment on the telecommunications market.

In the opinion of GR, most if not all the findings of the PTA's survey indicated that the chain of substitution has not been broken. Internet service provided by fibre-optic cable and xDSL were substitutability products for each other, and in fact everything seemed to indicate that wireless service also was and/or would be as well. This was apparent among other things from the fact that in many areas 4.5G offered more bandwidth than xDSL connections provided by copper technology. The principal findings also indicated that the end user of the service had limited knowledge about the carrier of the service, irrespective of whether it was provided by

fibre-optics or other means. To illustrate that point, about 12% of Síminn's customers who participated in the survey thought they had GR's fibre-optics as the carrier for the service provided by Síminn. Only about 65% of the people surveyed said they knew what type of connection they had, yet from the aforesaid it can be seen that this was not the case, and about 34% did not know what operator provided their local loops.

The PTA's position

GR's comment is firmly in support of the PTA's findings regarding the chain of substitution, and that copper and fibre-optic local loops belong to the same market. GR is correct in its conclusion that users have limited knowledge of the carrier of the service. The PTA previously discussed the substitutability of mobile network solutions and concluded that they were outside the relevant market. In that regard, see the discussion in the updated initial drafts (Appendix A) and in Appendix B.

GR stated that GR's message to the Competition Authority and the PTA over the years regarding the strengths of the household package deal offered by Síminn was clearly reflected in the findings of the survey, where 52% of respondents who named their service package said they had the aforesaid household package. This was supported by the fact that the average cost for those who bought service packages on a monthly basis was consistent with that of Síminn's household package, and the average cost indicated by the answers was ISK 17,257, although only about 50% of respondents had made a comment of the cost. Most of those who bought a comprehensive package did so from Síminn and the same can be seen with the purchase of a landline, where over 60% of respondents who purchased services from Síminn had a landline, as it is included in the household package. It would be interesting to take into account that around 82% of respondents who purchased TV services, did so as a part of a package deal. Along with this, Síminn's new financial report for the third quarter of 2020 could be examined, where a large increase in revenue from TV service is evident, cf. e.g., Kjarninn's article on the matter.

The PTA's position

GR's comment mainly pertains to factors concerning Síminn's market power. However, these factors support the PTA's definition of the service market, as the popularity of the Household package promote the use of copper local loops in areas where Míla does not have fibre-optic local loops, since Síminn has just started to offer its services via GR's fibre-optic local loops.

GR said, that when looking at the decisions on where an end user purchased telecommunications service, cf. the conclusions of the consumer survey, then speed was rather low in the rankings, or in third to fifth place, while price was at the top and service in between. This corresponded to the comments put forward by Síminn in paragraph 81 in their comments on the preliminary draft. In GR's previous comments data was presented on the transfer from GR's fibre-optic cable to Míla's copper local loops, that again refuted Síminn's statements. Regarding Síminn's statements in paragraph 82 of the company's comments on the preliminary draft, on there not being a real increase with Síminn, see the PTA's statistical report which quite clearly showed that the number of Síminn's customers had increased rapidly in the internet market and that Síminn's market share had increased simultaneously. For example, Síminn's market share in the internet market had been 45.9% in 2017 but had been 47.6% by then end of 2019. Therefore, GR could not see that any argument was behind Síminn's statements in paragraph 83 in Síminn's comments on the preliminary draft.

The PTA's position

GR's comment supports the PTA'S substitutability assessment and the PTA'S assessment of the MMR consumer survey.

GR said that the PTA had responded to Míla and AM's indication and conducted a SSNIP test. According to the consumer survey conclusion, consumers who had an internet connection via a fibre-optic connection were similarly willing to switch over to an internet connection via Ljósnet (copper cable), with a notable but permanent price increase, as consumers with an internet connection via copper local loop were to switch over to a fibre-optic connection. The conclusion thus proved substitutability between copper and fibre-optics.

The PTA's position

GR's comment supports the PTA'S substitutability assessment and the PTA'S assessment of the MMR consumer survey.

GR said that the survey showed that goals for fibre-optic rollout in Iceland continued to be very important for the overall experience based on responses in East Iceland, where there is the smallest distribution of fibre-optics in the country. The hold that the Síminn Group has had based on SMP was therefore still in place.

The PTA's position

The PTA agrees that the goals for increased distribution of fibre-optics is important. However, the position on the market today is that there is still a significant ration of copper connections, both in areas where there are no fibre-optic cables and also in areas where fibre-optic cables have been laid. The PTA does not believe the comment will affect the substitutability assessment.

GR wanted to reiterate that a substitutability existed, not only between xDSL and FTTH, but also between connections provided at a fixed location and a mobile network, in particular with the arrival of 5G. In light of the aforementioned data and the conclusion of the PTA survey, the argument for substitutability had increased even more than before. Furthermore, Síminn is still offering services via copper cables and did not mention that fact in the sales offer, but on the contrary referred to fibre-optics when Síminn's salesperson sold the service.

The PTA's position

GR's comment is firmly in support of the PTA's findings that internet connections via copper and fibre-optic local loops belong to the same market. However, the PTA believes that 5G connections will not become substitute service during this assessment's term of validity, see further discussion in the updated preliminary draft (Appendix A) and in Appendix B.

Nova claimed to still be in agreement that a substitutability existed between the connections in question. This was evident in Síminn's significant growth.

Nova considered that the PTA assumed that the cost analysed prices of copper connections, that were (or must be) considerably lower than the prices of fibre-optic connections, would reduce the price of fibre-optic cables. The PTA had in this context, referred to a substitutability analyses that showed that customers primarily wanted internet that worked and didn't really care whether that was based on copper connections or fibre-optics, as long as the customer's connection was at a good price. In Nova's estimation, it is uncertain whether the price for local

loop fees would generally decrease. Nova considered little will on behalf of the Síminn Group to reduce the price of the access fee, and that this was evident in that the access fee offered by Síminn in retail was mostly the same, regardless of speed or type of connection. In Nova's estimation this was yet another confirmation of the substitutability between internet connections whether via copper connections or fibre-optics connections.

The PTA's position

Nova's comment supports the conclusion of the PTA's substitutability assessment. In chapter 4 below, the PTA will further respond to Nova's comparable comment on prices.

4 Economic Replicability Test - ERT in place of cost analyses of access services via fibre-optic local loops.

4.1 The PTA'S discussion on ERT in place of cost analyses of Míla's fibre-optics in the additional consultation document

4.1.1 Obligation for price control in accordance with the PTA's preliminary draft

42. In the PTA's preliminary draft, it would have been assumed that Míla would be subject to an obligation, in markets 3a and 3b, for price control, which would include cost analysed price of wholesale access to products and services, both on a copper network and a fibre-optics network. This would involve an addition to obligations Míla was subjected to in 2014, since then no cost analysed price had been provided for fibre-optic local loops.

43. According to the preliminary draft an obligation was intended to be imposed on Míla for price control for local access to fibre-optic access networks and associated facilities and also for bitstream access provided over fibre-optic local loops. Míla should submit the wholesale tariff for the relevant access and associated facilities to the institution for approval. The tariff should take into account the cost of the service.

44. Míla's cost analyses for access to fibre-optic local loops should have been based on the same main criteria as the cost analyses for copper network, i.e., based on historical costs as further defined in the preliminary draft.

45. In order to counteract a possible increase in the price of copper local loops concurrent to their reduction, the PTA had considered it necessary to aim for one local loop price, regardless of technology, no later than January 1, 2024, or when the tariff is reviewed again. The PTA considered that the same could apply to bitstream service, i.e., that the aim during the term of this market analysis should be that the same tariff should apply to bitstream, regardless of whether it was provided over fibre-optic or copper.

46. The price for access to fibre-optic local loops that had received state aid would follow the relevant rules. This could lead to different criteria being applied to the pricing of Míla's local loops that had been laid with government subsidies than to those that had been laid based on market criteria.

4.1.2 Comments in consultation on preliminary draft

47. In consultation on the PTA's preliminary draft comments had been made on behalf of the Síminn Group on the PTA's plans to provide for a cost analysed tariff for access to fibre-optic local loops.

48. Míla had referred to a discussion in the preliminary draft on articles 48 and 49 in the EU Commission recommendation, dated 11 September 2013 on the implementation of harmonised non-discrimination obligations and cost analysis methodologies. There, the conditions that would be needed to be met in order for it to be advisable to apply the Economic Replicability Test - ERT instead of allocating prices on the basis cost analysis were covered. Míla considered that the PTA had not attempted to demonstrate these factors.

49. Míla considered it incorrect that there were no grounds to apply less stringent obligations in the form of an ERT. During the lifetime of the analysis, parties other than Míla would have rolled-out fibre-optic cables to 90-95% of homes in the country. Most, if not all, service providers in Iceland, besides Síminn, would choose another network operator on market 3 when possible. Therefore, the PTA had no real reason to subject Míla to a price control obligation, let alone in areas where Míla had no infrastructure or where Síminn did not have market dominance like in the Greater Reykjavík Area.

50. Míla considered the PTA's assessment that deployment of next generation access networks (hereinafter NGA) was so well advanced that it was no longer necessary to base obligations on incentives for development, to be incorrect. Míla had a long way to go in completing its fibre-optic rollout, as the company were far behind its competitors. The fact that a large ratio of homes could get fibre-optics, did not mean that the project was far along in terms of cost. The reason being that so far Míla had focused on the most efficient access addresses, i.e., apartment buildings or collaborative projects. Thus, Míla had only laid to about 1/3 of access addresses in the country. With this market analysis Míla was being prevented from laying to the remaining 2/3.

51. In Míla's assessment, the intended obligation of "the same price all over the country" would lead to economic development in the biggest urban areas where competition was prevalent, subsidising uneconomical development elsewhere. Such obligation would reduce Míla's competitiveness in competitive areas and thus reduce incentives for investments in more uneconomical areas. Míla considered that the PTA's decision no. 21/2014 entailed legitimate expectations for the company that no tariff obligations would be imposed on its fibre-optics during the lifetime of this analysis. It was evident that such investments could generally not be depreciated in a shorter period than at least 20 years. Thus, Míla could have expected that no tariff obligations would be imposed on the company's fibre-optic cables.

52. Míla could not see that the criteria had changed, let alone significantly, from decision no. 21/2014. For this reason, Míla also considered the intended obligation to neither conform to item c of Paragraph 3 in Article 27 of the Electronic Communications Act, that the imposition of obligations should be justifiable with regard to the initial investment of the owner of the facility and the risk taken with the investment, nor the rules of proportionality.

53. Míla stated that the PTA intended to impose significantly restrictive obligations on Míla, amounting to hundreds of millions of ISK, regardless of the fact that in an international context Míla was a small company in a very small market. Míla's proportional costs from the PTA's obligations was therefore several times higher than what generally occurs elsewhere. Míla therefore considered that the PTA did not pay sufficient attention to the obligations being proportionally correct in relation to the Icelandic micro-market, but that there seemed to be planning to impose obligations that would be the most restrictive in Europe.

54. In Analysys Mason's (AM) report, which was part of Míla's comments, it had been pointed out that the only argument based on prices that had been used to support the price control obligation was GR's statements about Míla's underpricing. However, no real proof of such underpricing had been provided, e.g., with a comparison of the real costs. The PTA had used the unsubstantiated claims of competitors that had an incentive for Míla to raise its prices. Even if GR's claim was true, the problem being reported was underpricing. If that was considered a risk that needed to be amended, an appropriate choice of a minimum price in wholesale would be calculated based on the incremental costs.

55. AM had pointed out that an ERT could be used in place of a cost-based tariff. If there was a need for an obligation for price control, ERT would be a better option. In AM's assessment, retail prices were determined on a competitive basis, which meant that consumers were already benefiting from economic pricing and referred to implementation in Ireland and Luxembourg in support of their case.

56. AM had also stated that in Ireland an obligation had been imposed on a cost-based tariff for copper local loops and FTTC, but that the price control obligation on FTTH was in the form of an ERT. The point of imposing a milder price control obligation in the form of an ERT for fibre-optic cables was to promote the investment of multiple parties in such networks. ComReg had pointed out that the uptake rate of fibre-optics was low, and it was difficult to predict, which created uncertainty about prices and thus investment incentives.

57. In Luxemburg, the prices for copper, VULA and access to facilities (both copper and fibre-optic connections) had been determined based on costs. However, the price for access with fibre-optic cable had been determined with ERT, because of how uncertain the development of demand for efficient high-speed internet would be and to promote economic investment.

58. Síminn drew attention to the fact that the conditions for imposing an obligation on the basis of Article 32 on price control were dependent on analysis revealing that due to inactive competition, the SMP company demanded exorbitant fees or that there was an abnormally small difference between the retail price and the wholesale price. Síminn pointed out that the authorisation according to Article 32 does not cover situations where the electronic communications company in question could potentially raise prices, but an analysis would need to reveal that the company actually demanded exorbitant prices. There was no authorisation to impose a price control obligation if pricing is too low or if the difference between the wholesale price and the retail price was too big. The PTA did not seem to be maintaining the latter and neither that Míla's pricing was too high.

59. Síminn was concerned that if there were no indications that pricing was too high, whether at Míla, Tengir or GR, there was a risk that an electronic communications company that purchased the service from the parties in question would not be able to take advantage of competition between the parties, whether it was in bitstream service or, as appropriate, in the lease of local loops. It had been known that tariff obligations led to the disappearance of pricing flexibility, which would lead to purchasers of the service not being able to negotiate their terms within a certain framework. Síminn proposed that the PTA first defined what the concept "exorbitant fees" entailed and thus lay the foundation for a criterion that the PTA could provide to assess whether companies were demanding exorbitant fees, which purchasers could not push down on the basis of competition between parties. Thus, the PTA could intervene, if necessary, but not sooner. Otherwise, there would be a risk of the PTA intervening too soon and damaging the competitive process inherent in negotiations between two parties.

60. Three municipalities outside the Greater Reykjavík Area; Fjarðabyggð, Snæfellsbær and Stykkishólmur had submitted comments emphasising the importance of the PTA not imposing obligations that could impede further development of the fibre-optic network in rural areas. It was important to create an environment that supported the continued development in urban areas outside the Greater Reykjavík Area in accordance with Parliament's telecommunications policy for the years 2019-2033.

61. Tengir supported the PTA's intention to add an obligation on cost-analyzed prices of Mila's fibre-optics in the relevant wholesale markets. Tengir placed great emphasis on the importance of this, as there were indications that the Síminn Group kept prices down or even engaged in subsidies/underpricing in the relevant market, thus significantly restricting the competitive basis of independent network operators. In addition, Tengir emphasised the importance of the obligations that the PTA had concluded were necessary so that a company with market dominance did not have the opportunity and incentive to discriminate between competitors in pricing.

62. Vodafone wholly supported the PTA's plan to impose an obligation on cost-analyzed prices on fibre-optic on Mila and considered it very important. Furthermore, Vodafone stated that it would want to use VULA access and encouraged the prices for VULA to be cost-analysed again.

63. Vodafone referred to Paragraph 1438, where it was stated by the PTA that certain rules applied to networks that were subsidized by the state or municipalities and that those rules were to remain in force when the networks were sold. The PTA had the authority to decide access prices for such networks with price comparison, but obligations subsequent to market analysis can only be imposed on parties that have been designated as having SMP, i.e., Mila in this instance. According to Vodafone it was important that the PTA determined access prices for Mila's state-sponsored networks with price comparison. Vodafone referred to Paragraph 1439, where it states that the above could mean that another price may apply to Mila's local loops that were deployed with state subsidiaries than to those that were deployed on market terms. Today, Mila collects according to general countryside tariff for its fibre-optic local loops that were deployed with state subsidiaries.

4.1.3 Review of plans for obligations on price control

64. In response to the comments received, the PTA had decided to take the parties' views into careful consideration and re-examine the criteria for the obligation on price control regarding Mila's fibre-optic network, including the PTA's assessment of market conditions, relevant recommendations pursuant to the EEA Agreement and implementation in other EEA states.

4.1.4 Legal authorisation and implementation within the EEA

65. According to Article 17 of the Act on Electronic Communications no. 81/2003, the implementation of market analyses, which was the basis for a decision on obligations, should be in accordance with obligations pursuant to the EEA Agreement. The Electronic Communications Act was based on directives on electronic communications from the year 2002, that were part of the EEA Agreement, cf. Annex XI to the Agreement. In Article 19 of directive 2002/21/EC on a common framework for electronic communications networks and services (Framework Directive), would provide for the authorisations of the EU Commission to issue recommendation for a consistent implementation of the application of the provisions of the Electronic Communications directives. Pursuant to the provision, NRA must follow such recommendations meticulously and justify it specifically if they consider it necessary to derogate from the recommendation.

4.1.5 Recommendation on access to the next generation of access networks September 20, 2010

66. The European Commission issued a Recommendation on regulated access to next generation access networks on September 20, 2010⁹. The preamble to the recommendation (item 3) emphasized the importance of consistent implementation in the monitoring of the electronic communications market, and therefore it would be appropriate to issue a recommendation that provided guidance to NRA which was intended to prevent inappropriate discrepancies in the application of the framework, but the NRA would still have leeway to take into account the conditions in the country concerned.

67. The preamble (item 6) also emphasised predictability in NRA measures as a key factor in encouraging investment. Therefore, it was important to have stability in the NRA's approach and in order to avoid uncertainty associated with repeated market analyses and new decisions on obligations, NRA should shed light on how changes in market conditions could affect the application of obligations in the future.

68. In the recommendation the emphasis was on a cost-related tariffs, but it also addressed the possibility for the NRA to accept a certain degree of flexibility in the collection of fees, e.g., discount terms of long-term agreements, which would reduce the risk involved with investments. In such cases care would have to be taken to ensure non-discrimination and that there was sufficient difference between wholesale and retail prices. It was recommended that the NRA would use pre-defined margin-squeeze tests for the purpose of monitoring that pricing was not harmful for competition, cf. Articles 26 and 27 with regards to local access and Article 36 with regards to central access.

4.1.6 Recommendation on consistent non-discrimination obligations and costing methodologies 2013

69. In 2013, the Commission issued a new recommendation on the consistent application of non-discrimination obligations and costing methodologies to promote competition and investment in broadband networks.¹⁰

70. The purpose of the recommendation had been to improve regulatory methods to promote competition, strengthen the internal market for telecommunications and support investment in next generation networks. The recommendation had also been intended to reduce legal uncertainty and increase long-term predictability in connection with investment in next generation networks. The recommendation was intended to provide further guidance on the principles of monitoring actions set out in the above-mentioned Recommendation 2010/572/EU, specifically as to the circumstances in which cost-related wholesale price obligations should be imposed and the circumstances in which they should not.

71. The principles set out in the recommendation applied to markets 4 and 5 according to previous recommendations on the relevant markets, or to other markets that would be defined later and belonged to the same network elements. These markets corresponded to markets 3a and 3b according to the current recommendation on the relevant markets.

⁹ RECOMMENDATIONS COMMISSION RECOMMENDATION of 20 September 2010 on regulated access to Next Generation Access Networks (NGA) (Text with EEA relevance) (2010/572/EU)

¹⁰ COMMISSION RECOMMENDATION of 11.9.2013 on consistent non-discrimination obligations and costing methodologies to promote competition and enhance the broadband investment environment (2013/466/EU)

72. The recommendation¹¹ stated that it would be necessary in order to promote investment and innovation to allow those who invest in NGA networks a certain flexibility in pricing. This would allow operators with significant market power (SMPs) and those requesting access to share part of the investment risk by specifying wholesale prices in accordance with the commitments of those requesting access. This could lead to lower prices for long-term contracts with the guarantee of purchase for a certain quantity, which would mean that purchasers of access would take on some of the risk regarding future demand. Flexibility in wholesale pricing would also be necessary to create leeway for different product development and retail pricing.

73. In order to prevent leeway in pricing from leading to exorbitant wholesale prices for SMPs, safeguards would have to be put in place to protect competition. In addition to strict non-discrimination obligations, such as Equivalent of Input (EoI) and technical replicability, economic replicability for downstream services should be ensured, as well as applying the obligation to analyse the cost-based price of copper connections.

74. NRAs should regularly request information on investments and rollout plans regarding NGA networks, in order to monitor the development of the investment environment and competitive conditions. Such information should be provided in the relevant decision on obligations.

75. With regard to the advantages of flexible pricing according to the above approach, it could be considered that the wholesale price for access to NGA local loops or equivalent solutions would be given sufficient restraint to counteract price-related competition problems if;

- (i) competition from other network operators or "price anchor" form cost-based wholesale prices on copper networks placed visible restrictions on retail pricing.
- (ii) An "ex ante" economic simulation test (ERT) would be available in cases where no cost-related price obligation was applied and
- (iii) there would be an obligation in place to provide wholesale access on the basis of EoI.

76. If these conditions were in place, NRA should not apply the obligation on cost-related prices regarding wholesale access to NGA networks.

77. In the case of central virtual access to NGA networks (such as bitstream), sufficient competitive precautions would be considered to be in place if those requesting access could rely on access services at the adjacent market level, i.e., local loop rental or equivalent, with the conditions put forward above, if the actual use of such access options or the existence of other networks created visible restrictions on retail pricing. Such restrictions were not enough to consider it active competition on a wholesale level, but they should hinder SMPs in demanding excessive retail prices.

78. Leeway in fibre-optics pricing was subject to measures that might be taken to combat to small a difference in wholesale and retail prices, if such a condition were revealed through an ERT.

¹¹ Discussion of the application of ERT instead of cost analysis and its purpose, can primarily be found in items 49-69 of the preamble, point 48-58 of the recommendation and in Annex II thereto.

79. The decision to not apply the obligation on cost analysis should not extend to material infrastructure, such as conduits and ducts.

80. It was assumed that the NRA could impose an obligation on cost-related prices on a fibre-optic network, without carrying out a new market analysis, provided that market conditions had not changed significantly, if the SMP in question had not met the conditions set in connection with the non-discrimination obligation. The possibility of such a response to breaches of the non-discrimination obligation should be provided in the implementation of the obligations.

81. In order to reveal whether competitors could economically mimic the network operator's range of services at the downstream production level, with the regulated wholesale access available, in cases where the cost analysis obligation was not in place, NRAs should perform an ERT. Thus, the aim was to ensure that SMPs would not abuse the freedom in pricing to keep competitors out of the market.

82. The test would verify that the difference between the retail price of a company with significant market power (SMP) and the price for NGA wholesale access was sufficient to cover the downstream additional costs and an equitable share in common costs. Replicability could not be considered to exist if the network operator's retail arm could not run the relevant retailing activities with a profit based on the wholesale price that was offered to competitors. This was based on competitors who enjoyed the same efficiency as the network operator.

83. If special market conditions prevailed, such as if competitors' incomes and growth had been poor, a regulatory authority could make changes to the test criteria, so that the network operator's costs were examined in terms of efficiency that competitors could be expected to enjoy.

84. Following market analysis, NRAs should define and issue in a decision the procedure and criteria they intended to apply when implementing the test. The test could be implemented before the network operator's new retail service entered the market, e.g., concurrent with the technical replicability test. It would not be necessary to implement the test for all retail services entering the market, but only for so-called "flagship" services, as these were the most important retail products on the market in terms of market share, quantity and value, based on access to NGA networks and that included broadband services. It might also be appropriate to implement the test immediately following the decision that authorised free pricing on fibre-optics, or when changes occurred in the market.

85. ERT tests should be defined beforehand, and that definition must include a few specific key factors in order to ensure predictability and transparency. The LRIC model should be used when examining the network operator's costs at the downstream production level and assessing the spread between the relevant retail product and the wholesale access that was used the most or expected to prevail during the decision's term of validity. If new access services were to emerge and become common, the access service used for the test might need to be replaced. If there was a difference in conditions between areas, the test might have to be adapted on a regional basis.

86. BEREC and the Commission would be jointly tasked with monitoring the impact of the recommendation, in particular on investment, competition and retail prices, and providing further guidance to NRAs on their implementation.

87. The decision on applying ERT instead of the obligation on cost-analysis should contain a description of the content of the ERT test and that description should entail at least:

- (i) relevant downstream cost of production level to be taken into account.
- (ii) relevant cost standard.
- (iii) relevant regulated wholesale inputs and the relevant reference prices.
- (iv) relevant retail products.
- (v) relevant time period.

88. Procedures should also be provided for, including that the NRA may initiate testing on its own initiative or at the request of a third party, at any time, but no later than three months after the retail service in question had entered the market. The test should be completed as quickly as possible and no later than four months after the start of procedures.

89. Descriptions of what measures would be taken if the relevant company did not pass the ERT test should be provided.

4.1.7 BEREC guidelines on ERT tests

90. BEREC had issued a guidance document on the implementation of ERT tests in 2014.¹² The document included further elaboration on the principles set out in the Annex to the abovementioned recommendation of the Commission from 2013 (2013/466/EU).

91. The document would include explanations of various factors of the ERT test that had not been fully explained in the recommendation, such as depreciation methods, reasonable profits, the relationship between use of the average user and price, handling of temporary offers and discounts and geographical division. Criteria regarding economies of scope were discussed, but NRAs would have to decide how much economies of scope the network operator in question should take into account when assessing the downstream costs, in which case three main options would be considered:

- Equally efficient operator (EEO) - Assuming that the network operator had the same economies of scope in the downstream market as the SMP party, the costs of the SMP party would then be used and taken from its accounts.
- Reasonably efficient operator (REO) - Assuming that the network operator had not achieved the same economies of scope as the SMP party. Assuming that a new party in the market would eventually obtain full economies of scope.
- Adjusted equally efficient operator (adjusted EEO) - The costs of the SMP party would be assumed, but then the costs would be adjusted to a smaller market share.

92. The document also included a discussion on the main methods institutions were already applying when implementing ERTs.

¹² BEREC Guidance on the regulatory accounting approach to the economic replicability test (i.e. ex-ante/sector specific margin squeeze tests) BoR (14) 190.

4.1.8 Implementation in EEA states

93. When examining the implementation of NGA networks within the EEA, as it appeared in the latest market analyses and decisions of member states, it was revealed that the majority applied less stringent obligations than cost-analysis to NGA networks. Those states that applied an obligation on cost-analysis had received comments on that in the EU Commission's statements. Examples include the Commission's comments regarding Estonia's decisions in 2017 and Poland's in 2019.

94. It was obvious that the implementation within the EEA leaned towards imposing less stringent obligations than cost-analyses for NGA networks, as was recommended in the aforementioned EU Commission's Recommendation from 2013 (2013/466/EU). The Commission had emphasised in its comments on market analyses and decisions on obligations, that the main line set out in the Recommendation be followed, and not apply more stringent obligations unless necessary in light of special circumstances in the relevant state.

4.1.9 Re-evaluation of circumstances

95. In the preliminary draft it was the PTA's assessment that transparency and non-discrimination obligations were not sufficient in themselves to resolve potential competition problems such as cross subsidies, discriminatory pricing and excessive pricing. The PTA was of the opinion that an obligation for price control would be necessary to strengthen competition in the relevant markets and at retail level. The PTA considered it necessary to facilitate the entry of independent service providers to the relevant markets and to ensure that electronic communication companies already operating there could compete with Síminn Group under normal competitive conditions. In order to ensure that the price for access would be fair and natural and cost-based, the PTA considered it necessary to impose an obligation on Míla regarding price control, both with regard to copper and fibre-optic local loops.

96. The PTA had assessed the factors that needed to be present in accordance with Recommendation 2013/466/EU in order for it to be considered unnecessary to apply a price control obligation with regard to fibre-optic networks. Firstly it had been assessed whether a "copper anchor" existed, but it was the cost-analyzed wholesale copper network access that kept back the prices for the next generation of service (NGA service) in the manner that the NGA service would be priced in accordance with the will of consumers to pay for additional transmission capacity and activity which the retail service, that was based on a NGA network, could provide compared to a retail service based on a traditional copper network.¹³

97. In its preliminary draft the PTA considered that there were indications that the price for access to copper local loops did not function as a *copper anchor* in this country, among other things because the price offered to consumers by the largest telecommunications companies were entirely independent of the speed of transmission of the internet service offered. In reality, most of the connections that users were purchasing could be categorised as high-speed Internet (over 30 Mb/s), which is the definition for the next generation networks (NGA). Consumers therefore did not have the option of less expensive legacy copper network connections, as is the

¹³ 'Copper anchor' is a cost-oriented copper wholesale access product which constrains the NGA prices in such a way that NGA services will be priced in accordance with the consumers' willingness to pay for the additional capacity and functionalities an NGA based retail product can provide in comparison with a copper-based retail product.

case in many locations in Europe. Also, the retail price for local loop lease (line charge/access charge) had been moving away from the cost-analysed price for copper local loops, and therefore it seemed that they did not act as a copper anchor for retail products. In the PTA's assessment, it was still not unlikely that the price of copper local loops had some impact on the market, although it was not possible to demonstrate this with any certainty. The PTA also considered it likely that the effect of copper prices was diminishing during the term of validity of the analysis of switching to fibre-optic local loops.

98. After reviewing its arguments in support of the lack of a copper anchor, with reference to the comments submitted and Recommendations 2013/466/EU, the PTA concluded that the institution had underestimated the effects of the cost-analyzed price of copper local loops. It was clear that the retail price for fibre-optic network followed the retail price of copper network, as the telecommunications companies did not make a distinction between the underlying networks when pricing their retail service. Even though the retail amount of the line charge had been increased beyond the increase in the wholesale amount of the local loop charge, the price formation when it came to retail packages in their entirety must also be taken into account. The price of service packages had generally not increased proportionally in the same way as the line charge. Copper local loops still accounted for just under 70% of the total number of Míla's local loops actively being leased, and therefore represented a considerable part of the market.

99. The consumer survey that the PTA had commissioned in October 2020 had indicated that a large part of consumers were prepared to switch to optical network (i.e. VDSL copper local loop) if the price for optical network packages (FTTH) was increased by about 10%. It had also been discovered that speed was generally not a decisive factor when it came to selecting an internet service. This supported the conclusion that cost-analysed connections over copper local loops could have a restraining effect on retail service provided by fibre-optic cable.

100. Another condition that in accordance with Recommendation 2013/466/EU could lead to there being no stipulation for cost-analyzed prices for fibre-optics was competition from other networks. It was clear that fibre-optics networks existed that were not under the control of Míla or Síminn Group in the operating areas of GR, Tengir and Snerpa and in areas where state-aided networks in rural areas were not operated by Míla. However, each area only had one other access network, except in Reykjanesbær, where Kapalvæðing operated a cable system. In the preliminary draft, the PTA had considered it possible that the monthly prices on offer for those networks might constrain Síminn's retail prices for Internet connections supplied by fibre-optic cable. As stated in the PTA's geographical analysis, a greater degree of competitive pressure seemed to exist in some areas where other fibre-optic networks had been installed. However, the PTA did not consider the competitive pressure in those areas to be sufficient to justify separate geographical markets (only different requirements by area), as only one competitor was present in each area and the competitive conditions were not "significantly" different from one area to another, as Síminn had been adding to its market share in these areas in recent seasons. In the assessment of the PTA, the aforesaid competitive pressure was not sufficient to consider there to be effective competition at the wholesale level, yet it could be sufficient to prevent a party with significant market power from demanding excessive retail prices. It should be kept in mind that Míla's fibre-optic local loops were mostly either in competition areas or subject to rules governing state sponsorship, and therefore some factors restrictive to pricing had to be present.

101. The PTA considered, in light of the dominant arrangement in the EEA Area, where the most common course of action was to impose less stringent obligations for fibre-optics in accordance with the EU Commission's Recommendation 2013/466/EU, that it was proper not

to require an overly strict assessment of the existence of the aforesaid conditions. It was clear that both of these factors were present to some extent, and the PTA considered this sufficient to reach the conclusion that it was proper to apply ERT tests instead of cost-analysis of fibre-optic cables.

102. Another factor that must be present according to the recommendation 2013/466/EU, if the obligation for cost-analysed prices of fibre-optics were not imposed, was that an obligation for Equivalence of Input (EoI) be imposed. Such an obligation had been imposed on Míla in 2014 and had been implemented and the PTA monitored that it was complied with.

103. Part of the PTA's argument in the preliminary draft for plans for cost-analysed prices for fibre-optics had been the competitors' statements that Míla had underpriced fibre-optic connections in competitive areas. The PTA believed that such behaviour could in the long run create a better position for Míla to collect excessive prices, if the competition could not compete with Míla's current prices. The PTA had in fact not had conclusive evidence that Míla's pricing of fibre-optic local loops was below costs. Cases regarding harmful underpricing should rather be handled by the Competition Authority than the PTA. In its additional consultancy document, the PTA considered that this did not, at this time, provide a reason to impose an obligation for cost-analysed prices for Míla's fibre-optics in relevant markets. In regard to Síminn's comment on how underpricing could not be the basis for imposing an obligation for price control, cf. Article 32, the PTA had specified that the alleged underpricing had not been the main argument for imposing such an obligation. As described in the discussion on competition problems in the preliminary draft, it was the market structure, where SMPs were vertically integrated, which is considered to lead to too high wholesale prices, if nothing were to be done.

104. The PTA considered it proper to agree to the argument made by Síminn Group that there was still a considerable way to go to achieve the rollout goals for fibre-optic local loops. Pursuant to the parliamentary resolution on telecommunications policy for the years 2019-2033 the aim was for 99.9% of homes and business to have access to fibre-optics. Fibre-optic rollout was well underway in GR and Tengir's operating areas and in those rural areas that had received grants from the Telecommunications Fund. However, there were numerous smaller municipalities in rural areas where fibre-optic local loops had not been installed. Míla had installed a lot of fibre-optic local loops in GR's operating area and to some extent in Tengir's operating area, but that development was not yet completed. Therefore, there were not two competing fibre-optic networks everywhere in those areas. Míla stated that it had yet to install fibre-optic cables in 2/3 of access addresses in the country. The PTA considered it proper to avoid obligations that could endanger the goals for the fibre-optic rollout in Iceland, if possible. Major deployment of VDSL had taken place, and no further investments in such connections were anticipated. Even though VDSL networks could be considered NGA networks, it was clear that the long-term goal was that fibre-optic local loops would be present wherever possible. The PTA considered it proper, in light of the status of the fibre-optic local loop development nationwide, to not impose obligations for cost-analysed prices for such connection, at this point in time.

105. In addition to the aforementioned items, which the PTA had revised its assessment of, a few items regarding the status of related markets had changed since the preliminary draft was published. Firstly, Síminn had entered into an agreement on access to GR's network and this should strengthen GR's position in the relevant markets to some extent, but the scope of Síminn's business with GR remained to be seen, Síminn started its service on GR's network in August 2021. Furthermore, access to Síminn's television content had become easier and prices for "English football" in wholesale was lower than before and thus control over television

content was not as an influential factor in Síminn Group's market power as before. However, no agreements had been entered into between Síminn and Vodafone or other parties on wholesale or resale of Sjónvarp Símans Premium. Although that visual content would be accessible on GR's network in 2021, but, under the current circumstances, only for those consumers that traded with Síminn in retail.

4.1.10 Description of the intended obligation

106. With regards to the discussion above, the PTA now intended to not impose an obligation on Míla for cost-analysed prices for access to fibre-optic local loops in market 3a and bitstream through fibre-optic local loops in market 3b.

107. For other wholesale access in relevant markets the PTA considered proper that those obligations for price control proposed in the preliminary draft of the analysis of markets 3a and 3b.

108. The PTA's discussion on state-aided fibre-optic networks in the preliminary draft would remain unchanged, so that there is a possibility of an intervention in the pricing of access in accordance with the applied rules on state-aided networks.

109. The PTA considered it proper that access via VDSL connections, whether in the case of VULA or bitstream, be subject to an obligation for cost-analyzed prices in accordance with the preliminary draft, although such connections might be included in the definition of an NGA network according to Recommendations 2010/572/EU and 2013/466/EU. These connections were based on copper local loops from a street cabinet, and it could be assumed that such connections were mostly complete. Therefore, the PTA did not consider it necessary to apply less stringent obligations regarding these connections, since there was no need for an incentive for further investments in them. The same applied to access to ducts and conduits in areas where such an obligation would be applied.

110. Regarding the wholesale access to fibre-optic cables in the relevant markets that was not intended to be subject to a cost-analysis obligation in accordance with the above, the PTA considered it proper that Míla was subject to obligation for fair and reasonable pricing without discrimination.

111. Furthermore, Míla and Síminn were subject to an obligation that care would be taken that the difference between the price of wholesale procurements and the retail price for the most important subscription plans containing internet access, would not be too small.

112. Míla and Síminn would also be prohibited from applying harmful underpricing, on wholesale and retail level in the relevant and related markets.

113. However, Míla would be granted leeway in pricing to promote increased use of investments in fibre-optic connections.

114. Síminn would be required to ensure that the most important subscription plans that contained internet connections were priced in a natural manner and so that there was no margin squeeze between retail prices and wholesale procurements.

115. Míla and Síminn would be obliged to provide the PTA with all necessary information to verify that wholesale and retail pricing was in accordance with the above.

116. In order to monitor that there would not be abnormally small difference between wholesale and retail prices, so that competitors could not mimic Síminn's main retail offers, the PTA intended to begin preparing a decision on the application and implementation of an ERT test as soon as a decision on obligations following this market analysis had come into effect.

117. The PTA would consult with stakeholders on the implementation of the test, but it was clear that the PTA would rely on the Commission's Recommendation 2013/466/EU and BEREC's guidelines on ERT tests, when defining the factors that the test should take into account. An obligation to undergo an ERT test and provide all necessary information would be imposed on Míla and Síminn.

118. If, at any point, Míla and Síminn did not pass the ERT test that would be implemented and did not immediately remedy deficiencies, e.g., by Síminn raising the retail price or Míla lowering the wholesale price, or Míla violated the obligation of Equality of Input (EoI) then it could be expected that the PTA would have to make a decision on stricter obligations, such as cost-analysed prices of fibre-optic connections.

119. Míla should annually send the PTA information on investments and rollout plans regarding NGA networks, in order to monitor the development of the investment environment and competitive conditions.

120. The imposition of an obligation for ERT tests was part of monitoring that the obligation for non-discrimination was complied with. The aim was to ensure that competitors in the market had the same opportunities as the network operator to offer internet service packages at retail level at a price that was competitive with the price of the network operator's retail arm. The new EU Directive on Telecommunications 2018/1972 EECC mentioned ERT in Subparagraph 3 of Paragraph 1. Article 74 which discussed price control. However, it stated that an ERT test would be applied cf. Article 70, but that Article discussed the non-discrimination obligation. ERT test appear to be generally considered a part of the non-discrimination obligation. The ERT test, however, entails a kind of price control and the PTA therefore considered it proper to refer to both Article 30 of the Electronic Communications Act (on non-discrimination) and Article 32 (on price control), regarding the legal basis of the obligation for an ERT test.

4.2 Stakeholders' comments on the ERT test in place of cost-analyses of Míla's fibre-optics and the PTA's position on them

GR considered Míla's arguments that an obligation for a cost-related tariff would lead to Míla becoming uncompetitive in competitive markets and reduce the company's incentive to invest in areas with little competition or market failure, did not hold.

Whether a company invested in fibre-optic networks in areas with little demand for fibre-optic connections or market failure, would be resolved by other means. There would be government grants that would facilitate equal access for all parties in the market, both Míla and others, such as GR. In GR's assessment, obligations in those circumstances were not a controlling factor as Míla argued. Obligations were intended to maintain natural and efficient prices in the telecommunications market that considered investments by SMP operators among other factors.

The PTA's position

The main reason why the PTA reviewed its position regarding the intended obligation for price control for Míla's fibre-optics in the relevant wholesale markets, which was described in the PTA's preliminary draft, was that there was more proportionality in the ERT obligation on the Síminn Group and that such an obligation was consistent with the aforementioned EU Commission's Recommendation regarding non-discrimination obligations and costing methodologies from 2013, taking into account the competitive conditions in this country at the relevant wholesale markets and the related retail market. Conditions in this country had changed after the preliminary draft was submitted for consultation at the end of April 2020, this included Síminn's agreement on bitstream access to GR's fibre-optic network from last July. Perhaps the PTA placed too little emphasis on the importance of promoting the continued deployment of fibre-optic networks in those areas where such networks are not available.

Although government grants will undoubtedly continue to be available in some cases in the most rural areas, many fairly large urban clusters will be part of the fibre-optic rollout across the country, as it is unclear whether there is a market failure. Therefore, it is unclear whether government grants will be available in such locations. The PTA draws attention to the fact that imposing an ERT obligation on Síminn Group entails an increase in obligations from what currently applies, and in the PTA's assessment this obligation should provide the Group with sufficient restraint regarding pricing, at least for the time being. The PTA also draws attention to the fact that in recent years the deployment of fibre-optic networks has been rapid in Iceland while there has been no price obligation for fibre-optic cables, but this deployment has mostly been in the biggest urban areas and then in the most sparsely populated areas with the involvement of the Telecommunications Structural Fund and thus with government grants. That has led to more competition in those areas, although in the PTA's assessment it is not yet active. The PTA also reminds that further implementation of the obligation on Míla to provide information and access to the company's ducts and conduits in areas where there is little or no competition, is intended to promote the rapid deployment of fibre-optic networks in areas where no fibre-optic network currently exists.

The PTA therefore considers the aforementioned ERT obligation to reduce Míla's incentive for the continued fibre-optic rollout, e.g., in more rural areas, less than the intended obligation for cost-analysed prices for Míla's fibre-optics presented in the preliminary draft. It is clear that economy of scope is smaller in more rural areas and the costs of the deployment of a fibre-optic rollout higher. Therefore, the PTA does not consider it unnatural that Síminn's leeway for pricing be substantial, e.g., with regards to the above factors.

Nova referred to Paragraph 26 in the additional consultation document, where it is stated that Míla had claimed that the PTA intended to impose significantly burdensome obligations on Míla, regardless of the fact that in an international context Míla was a small company in a very small market and that Míla's proportional cost from the PTA's obligations was therefore several times higher than generally occurs elsewhere. Míla therefore considered that the PTA did not pay sufficient attention to the obligations being proportionally correct in relation to the Icelandic micro-market, but that seemed to be intending to impose obligations on Míla that would be the most restrictive in Europe.

In Nova's assessment it was not evident that the obligations the PTA intended to impose on Míla were proportionally more burdensome than elsewhere. In addition, it could be stated that in a small market and a geographically closed market such as in Iceland, there is a need for more stringent obligations for parties such as Míla than may be needed in larger markets.

Competition in telecommunications markets in Iceland was at a further disadvantage due to market type than was the case in most other countries.

The PTA's position

The PTA agrees with Nova that there could be a need for more stringent obligations in Iceland than in many places in Europe due to the small size of the market in Iceland. It is generally more difficult to achieve satisfactory economies of scope in small markets than in most places in Europe. Furthermore, the vertical integration of Síminn Group in Iceland is powerful. The PTA points out that fibre-optic networks have been installed by Míla in Iceland to a great extent, but also by the company's competitors. In light of that, the PTA considers it adequate, at least for the time being, to impose an ERT obligation on Síminn Group's fibre-optics and that the imposition of an obligation for cost-analysed prices could be seen as excessive in such circumstances.

GR referred to a discussion in the Analysys Mason (AM) report. AM's report pointed out that an ERT test could be used in place of a cost-based tariff, and that the former was a better option and in AM's assessment, retail prices were determined on a competitive basis, which meant that consumers were already benefiting from economic pricing.

GR stated that no further arguments were to be found on the above statement, instead AM referred to markets in Ireland and Luxemburg in support of the argument, without supporting its statement with physical data and information on the Icelandic markets under discussion.

First of all, it was not clear whether, and to what extent, markets in the aforementioned countries were comparable to the Icelandic market and whether any transferable conclusions on those markets would be applied to those in Iceland. There was no discussion on the peculiar situation prevalent in the Icelandic telecommunications markets, which was the vertical integration of Síminn in the retail market and Míla in wholesale markets 3a and 3b, its effects and the fact that these companies are one economic unit. In the opinion of European Competition Authority, and generally accepted views in competition law, this situation was considered one of the most serious threats to effective competition in the markets. There was also no information on whether the markets of these countries were the same in terms of the number of parties in the market, the extent of the fibre-optic rollout compared to copper connections or whether copper connections there were of comparable quality to those in Iceland or worse.

Thus, it would be impossible to draw the conclusions that AM allowed itself or claim that an ERT test would lead to the aims of the Electronic Communications Act, to strengthen effective competition by imposing obligations on SMPs, being achieved and result in the legal effect expected.

The PTA's position

AM referred to the fact that it would be more appropriate to use ERT test in place of obligations on cost-analysed prices for Míla's fibre-optics, noting that retail prices were determined on a competitive basis. Furthermore, AM referred to precedents from Ireland and Luxemburg.

The PTA has in its analysis reached the conclusion that there is no effective competition in the relevant wholesale markets, nor the related retail market, in Iceland. Although Síminn does not have the lowest prices on internet services in the retail market, the company offers a favourable electronic communications service and TV service bundle that has been popular with consumers and other electronic communications companies don't feel they can compete with. Such bundles

complicate all price comparison. Therefore, the PTA does not consider itself able to claim that retail prices are determined in this country on a competitive basis, although there is certainly some competition, in particular in the capital area.

The PTA reiterates that the majority of European states apply the aforementioned ERT obligation in place of an obligation for cost-analysed prices for fibre-optics, as that is in accordance with the aforesaid EU Commission Recommendations of 2013. Based on the competitive conditions in Iceland, which have been detailed in the response to GR's comment above, the PTA considers that the ERT obligation is currently a sufficient restraint on the Síminn Group's pricing. That obligation is an addition to the obligations currently imposed on Síminn Group, taking into account the vertical integration of the Group, pointed out by GR. The PTA therefore considers that obligation will probably lead to more competition in the term of validity of the analysis, than there has been, and is therefore in accordance with the aims of the Electronic Communications Act.

Whether competition will become sufficiently effective by the end of the term of the analysis, so that it will be possible to relax obligations on the Síminn Group, or whether competition will evolve for the worse due to unforeseen incidents, and further obligations will be needed, including an obligation for price control for Míla's fibre-optics, remains to be seen. The PTA will closely monitor the development during the term of the analysis and intervene with a new analysis if necessary.

Nova pointed out, regarding Míla's reference to AM's report, that Síminn Group had previously used that company for consultation and to protect its interests. Without any offence to that company whatsoever, it could hardly be assumed that this was a neutral party and that its contracted consultation should be assessed as such.

The PTA's position

The PTA agrees with Nova that the Authority must take the contracted reports from the market participant's consultant with a certain degree of reservation and that they must be viewed as such, i.e., as a part of the market participant in question's case. In general, the PTA has no possibility of examining what communication passes between buyer and contractor preceding such reporting or whether the buyer can influence the content and results of such reports. This applies to the aforementioned AM report, as well as other such reports that might come from market participants consultants.

Nova referred to Síminn's comment, in Paragraph 32 in the additional consultation document, where Síminn declared its concerns that if there were no indications that pricing was too high, whether at Míla, Tengir or GR, there was a risk that an electronic communications company that purchased the service from the parties in question would not be able to take advantage of competition between the parties. Therefore, the PTA should not intervene too early, otherwise there would be a risk of the PTA intervening too soon and damaging the competitive process inherent in negotiations between two parties.

Nova pointed out that either competitive conditions existed, which made regulating the market unnecessary, or not. These conditions did not exist in Nova's assessment and therefore there was a need for regulation for the above. Síminn's reflection that the PTA's regulation should be introduced at a later stage and on the basis of an unclear premise, was not good, as it made the operational environment non-transparent for market participants.

The PTA's position

The PTA points out that the conclusion of the market analysis is that Míla has SMP in the relevant wholesale markets. It requires the PTA to impose appropriate obligations on the company, in accordance with identified competition problems, in an attempt to strengthen competition in the relevant markets and related retail market. The implementation of obligations is a discretionary process where numerous factors need to be considered. Among others care must be taken to not go further when imposing obligations than is necessary, cf. the principle of Proportionality in the Administrative Procedures Act. Following the re-evaluation reported by the PTA in the additional consultation document, the PTA considered it sufficient, for the time being, to impose an ERT obligation on the Síminn Group in place of the obligation on cost-analysed prices of Míla's fibre-optics that was intended in the preliminary draft.

The PTA reiterates that the aforementioned ERT obligation is a new obligation for the Síminn Group, but to date no obligation has been applied to Míla for the pricing of fibre-optics. In light of the identified competition problems and the fact that the deployment of Míla's fibre-optic network has grown from almost nothing in 2014 to being significant today and will continue to grow over the life of the analysis, the PTA considers it necessary to ensure restraint regarding Síminn Group's pricing. As stated in the aforesaid additional consultation document, and as has been elaborated in the above answers, the PTA was of the opinion that under the present circumstances the obligation for cost-analyzed fees for Míla's fibre-optics could be seen as excessive, at least at this point in time. The PTA therefore does not agree with Síminn that the aforesaid ERT obligation is imposed at such an early stage as to result in harm for the competitive process.

Nova referred to the comments submitted by the municipal authorities of Fjarðabyggð, Snæfellsbær and Stykkishólmur, included in paragraph 33 of the additional consultation document, where said municipalities stressed how important it was that the PTA would not impose restrictions that could impede further roll-out of fibre-optic networks in rural areas and that it was also important to create an environment that supported continued roll-out in urban areas outside Greater Reykjavík, in accordance with Parliament's telecommunications policy for the years 2019-2033.

Nova was entirely of the opinion that all fibre-optics networks that were constructed for public funds should be subject to stricter rules and more restrictions than those who were not. In no way would it be acceptable for Míla to receive such economic resources unless it would clearly be of use to all parties in the telecommunications market in an equitable manner.

The PTA's position

The PTA points out that there are specific rules that apply to state-aided networks in accordance with the guidelines from the EFTA Surveillance Authority, and these contain provisions on open access to them and pricing. These apply even though Míla installed such networks using public grants or purchased such networks or acquired long-term use of them. The PTA has no say in whether smaller-scale network operators, including municipalities that have received state aid for the installation of fibre-optics in rural areas, sell or lease the relevant fibre-optic networks to Míla or other telecommunications networks. Such networks shall therefore be of use to all those who are interested in applying for access to them, irrespective of whether they lease a local loop or bitstream access.

GR referred to paragraph 41 in the additional consultation document, where it was stated that in the recommendations from the European Commission regarding access to the next generation of access networks of 2010 the emphasis was on a cost-oriented rates, but it also addressed the possibility for regulatory authorities accepting a certain degree of flexibility in the collection of fees, e.g. involving discount terms in long-term agreements, which would mitigate the risk involved with investments. In such cases care would have to be taken to ensure non-discrimination and that there was sufficient difference between wholesale and retail prices. It was also recommended that telecommunications regulatory authorities would use pre-defined Economic Replicability Test for the purpose of monitoring that pricing was not harmful for competition.

In light of the provisions of paragraph 1 of Article 32 of the Electronic Communications Act, it was in the opinion of GR unclear if the PTA had sufficient legal leeway to implement measures in recommendations that had no legal validity in this country, especially in light of the important interests for all participants in the relevant markets, in particular with regard to the determination of the scope and nature of the obligations that would be imposed on dominant companies for the purpose of ensuring active competition.

In the opinion of GR, the PTA would have to tread carefully in this regard and ensure that any obligations imposed would protect and promote active competition. GR reiterated that the purpose and intention of imposing obligations on a company which subsequent to extensive studies of the market had been designated a telecommunications company with significant market power was to balance the position of other telecommunications companies with regard to such a market participant and the power that it enjoyed. In this context, the facts about the market position of Síminn and Míla constituted evidence in and of themselves, in addition to the effects from the vertical integration of these companies that worked as one entity in these markets.

The arguments presented by Síminn and Míla were not sufficient to warrant a relaxation of the obligations that were meant to ensure an active competitive market. None of these arguments demonstrated that less stringent obligations would actually lead to more active competition, but rather the aim with all of them is to make it easier for the group as one entity to act on telecommunications markets. If the arguments of Síminn Group would meet with favor and approval, this would in the opinion of GR constitute giving dominant companies on the wholesale market a free rein with regard to the determination and arrangement of the fee for fibre-optic local loops, and thereby encourage a market which would be difficult to unravel in the long run or even entirely impossible.

The PTA's position

In light of the aforesaid recommendations from the European Commission of 2010 (the NGA recommendations), and also the European Commission recommendations of 2013 regarding non-discrimination obligations and costing methodologies, it is clear that telecommunications regulatory authorities can either impose an obligation for a cost-analyzed list of tariffs or a more relaxed ERT obligation if it is considered that there is reason to interfere with the prices of a given participant with significant market power. In this document the PTA has in its previous responses and the updated initial draft (Appendix A) and in Section 10 of Appendix B arguments are given to support why the PTA considers it more appropriate to impose the ERT obligation rather than require the cost-analyzed list of tariffs for Míla's fibre-optics, in the present circumstances. The ERT obligation gives Síminn Group more flexibility when it comes to charging fees and therefore should not impede further roll-out of Míla's fibre-optic network,

including in sparsely populated areas, while at the same time enabling the institution to monitor and ensure that the group's pricing is not harmful for competition.

The PTA disagrees with GR's claim that it is doubtful if the institution can find support in the aforesaid recommendations, as the PTA considers it clear that legal authority for the aforesaid ERT can be found in Article 30 of the Electronic Communications Act (the non-discrimination obligation) and Article 32 of the Electronic Communications Act (price control). The PTA considers the competitive conditions in this country to be consistent with the requirements stipulated with regard to applying the ERT test, cf. the aforesaid recommendations.

The PTA is of the opinion that an obligation to apply the aforesaid ERT test should promote increased competition in the relevant wholesale markets and the downstream retail markets, with a view to achieve a balance with regard to the position of the competitors of Síminn Group vis-à-vis the group. The PTA reiterates that this is a new obligation, as up until the present moment there has been no obligation regarding monitoring of the list of tariffs for Síminn Group's fibre-optics. Therefore, the PTA intends with the aforesaid ERT to impose stricter obligations for the group, yet not to such an extent as to require a cost-analyzed prices, at least not for the time being.

GR stated that Síminn Group had not presented any arguments that gave reason to relax the obligations that were intended to ensure an active competitive market, and that none of the arguments submitted demonstrated that less stringent obligations would in fact lead to more active competition, but rather the aim with them was to make it easier for the group to act on telecommunications markets, and in fact to give more or less free rein to dominant companies on the wholesale market when it came to pricing.

The PTA absolutely disagrees with GR's statement that by waiving the imposition of and obligation for cost-analysed fees and instead stipulate the application of ERT tests, Míla is being given a free rein with regard to pricing. ERT tests are intended to ensure a reasonable leeway between the pricing of the group's wholesale and retail products so that telecommunications companies can compete with the group. If the group fails this test, the PTA could either require a decrease in Míla's wholesale prices or an increase in Síminn's retail prices, or even impose an obligation for cost-analyzed prices on Míla in the event of serious infractions. The PTA therefore does not agree that it would be difficult or impossible for the PTA to unravel such conduct on the group's part in the long run.

Nova also referred to the aforesaid paragraph 41 in the additional consultation document.

Nova pointed out that there had been little to no signs of Nova offering discount prices in its competition with Míla, despite the fact that it conducted considerable long-term business with that company. Síminn was by far the largest customer of Míla, and therefore might be the party that would benefit most if such long-term contractual terms were offered.

The PTA's position

The PTA points out that the discussion in paragraph 41 in the additional consultation document regarding discount terms in long-term agreements applies with regard to a cost-analyzed list of tariffs for the next generations of access networks. So far, no obligations have applied to Míla in this regard when it comes to fibre-optics. The PTA has therefore not monitored Míla's prices for fibre-optic lines. As aforesaid, the PTA intends to waive the requirement for Míla to have a cost-analyzed prices for fibre-optics, and instead impose an ERT requirement on Síminn Group.

However, the PTA points out that a non-discrimination obligation has applied to Míla with regard to fibre-optics, both as regards prices and other terms, and this obligation will remain in force. The company therefore does not have the authority to discriminate between unrelated and related parties in a manner that cannot be justified objectively.

Nova refers to paragraph 56 in the additional consultation document, where the discussion of the ex-ante economic replicability test (ERT) was reviewed in the EU Commission recommendations on non-discrimination obligations and costing methodologies of 2013. It was stated in the aforesaid paragraph that the intention with the test was to verify that the difference between the retail price of a company with significant market power (SMP) and the price for NGA wholesale access was sufficient to cover the downstream additional costs and an equitable share in common costs. Replicability could not be considered to exist if the network operator's retail arm could not run the relevant retailing activities with a profit based on the wholesale price that was offered to competitors. This was based on competitors who enjoyed the same efficiency as the network operator.

Nova pointed out how little experience there was of using the aforesaid replicability test in Iceland. Nova estimated that the PTA would have to implement the tests at least quarterly and would need to have the ability to intervene swiftly and to ensure price adjustments at both ends (retail and wholesale) within a matter of days after the test indicated that prices were being applied improperly. The PTA would have to include various offers, such as opening offers (and their extent), in their assessment of retail prices.

The PTA's position

Nova correctly points out that the PTA has little experience of implementing ERT tests. However, this is not a reason for not imposing such an obligation, which in the assessment of the PTA is the most appropriate course of action in the present circumstances in light of the competitive conditions that exist in this country on the relevant wholesale markets and the downstream retail market.

As stated in Section 4.1.10 above and Sections 10 and 11 in the updated preliminary draft (Appendix A), the PTA intends in this market analysis to impose an obligation on Síminn Group regarding ERT test of the group's fibre-optics products. This obligation is expressed in general terms, and it is specified that it will be further elaborated in a subsequent, special PTA decision, and during the time leading up to that decision there will be national consultancy regarding said elaboration, and the EFTA Surveillance Authority and other telecommunications regulatory authorities in the EEA Area will also be consulted. Nova, like other interested parties, will then have an opportunity to comment on the elaboration before it will be finally affirmed in the decision. When that decision is available the PTA will implement the ERT tests on a regular basis, although at the present moment it has not been decided how frequently such tests will take place, nor if and then when the various offers will be taken into account in the assessment of Síminn's retail price.

However, the PTA can reveal that the PTA's intent is that the elaboration will be such that the institution will both be able to intervene with regard to Míla's wholesale prices and Síminn's retail prices, if the group fails the test. The elaboration of this item will nevertheless not be finally decided, any more than any other items of this decision.

The Competition Authority referred to the PTA's intentions that were described in the preliminary draft that an price control obligation would be imposed on Míla, which would entail

cost-analyzed prices for both copper network and fibre-optic network on markets 3a and 3b, and that the PTA had argued that a price control obligation was necessary in order to facilitate competition in these markets. As stated, the preliminary draft, the PTA had decided in the last market analysis in 2014 not to require a price control obligation with regard to Míla's fibre-optics in light of the limited extent of the company's fibre-optics installation. This had been done to create a "regulatory holiday" so there would be leeway for investment.

The Competition Authority pointed out that a considerable amount of time had passed since the PTA last did a market analysis of the relevant markets, and that there had been a long adaptation period without a price control obligation. Still, it had been the PTA's initial assessment that after this time had passed and, after extensive market analysis had taken place, that price competition in the relevant wholesale markets was still not sufficiently active despite the imposed restrictions of 2014 (yet without a price control obligation).

In light of the experience gained and the PTA's extensive analysis, it had to be considered more unlikely than not at the present moment that competition would get stronger or more active without further price control obligations.

The PTA's position

In Section 10.1.9 above, and Sections 10 and 11 in the updated preliminary draft (Appendix A), there is a detailed discussion of the re-evaluation of the competitive conditions and of the intents declared in the PTA's initial assessment regarding the imposition of the obligation regarding a cost-analyzed list of tariffs for Míla's fibre-optics, and the preferred course of action to require Síminn Group to pass ERT tests. See those sections. Among the factors considered are that the PTA will not impose more severe restrictions on Síminn Group than necessary in light of the analyzed competition problems, and also that the aforesaid ERT requirement constitutes more severe restrictions for Síminn Group's fibre-optic networks than those that have been in place up until now.

The Competition Authority does not give detailed arguments regarding why the institution considers the aforesaid ERT requirement to be unlikely to strengthen competition in telecommunications markets in this country without further requirements in connection with lists of tariffs, other than to make a general reference to the experience obtained. The PTA considers it is not yet time to conclude whether the aforesaid ERT requirement will prove satisfactory when it comes to strengthening competition in telecommunications in this country. If this does not prove to be the case, or if the state of competition deteriorates, it will certainly be an option for the PTA to perform a new analysis whereby a requirement for cost-analyzed list of tariffs will be imposed on Míla. The PTA will closely monitor the development of the aforesaid telecommunications markets after this analysis has taken place and will be swift to take action if necessary. The PTA also reiterates that the aforesaid ERT requirement can entail an intervention in the group's pricing, if the group fails the test.

The Competition Authority pointed out that in paragraphs 70-72 in the additional consultation document the PTA had reached the conclusion that the requirements according to the recommendations regarding non-discrimination obligations and costing methodologies of 2013 regarding copper foundations were not satisfied, i.e., that copper connections did not have a restricting effect on the price of fibre-optic connections. Consumers were not offered cheaper copper connections, and the retail price for leasing local loops was moving away from the cost-analyzed price for copper local loops. On the other hand, the aforesaid amendment draft from the PTA, now part of the consultancy process, included the amended conclusion that a so-called

copper anchor seemed to be in place. According to the PTA, the retail price of fibre-optic network followed the retail price of copper network, and even though line charges had been raised beyond the wholesale price, it was also proper to consider the price formation for retail packages (bundles) which had not increased proportionally in the same way as the line charge, cf. paragraphs 70 and 71 in the PTA's additional consultation document.

As regarded the effect of bundles in the assessment of a potential copper anchor with regard to the pricing of these wholesale products, the Competition Authority considered it proper to state [...] In light of the aforesaid, the Competition Authority was of the opinion that a smaller-scale increase in the price of bundles should have limited significance in this context when it came to the assessment of the existence of a copper anchor, and whether the requirements of the aforesaid recommendations were satisfied, especially with regard to local loop market 3a.

The PTA's position

Section 4.1.9 in the additional consultation document included a discussion of the reassessment of the conditions with regard to the price control obligations for Míla's fibre-optics. In paragraph 74 of the aforesaid Section, and in Section 4.1.10, the PTA went on to describe its intent not to impose such an obligation on Míla, but rather to stipulate that Síminn Group must pass an ERT test.

It was stated in paragraph 68 in Section 4.1.9 that according to the preliminary draft it was the assessment of the PTA that transparency and non-discrimination obligations were not sufficient in themselves to resolve potential competition problems such as cross subsidies, discriminatory pricing and excessive pricing. The PTA was of the opinion that an obligation concerning monitoring of lists of tariffs is necessary to strengthen competition in the relevant markets and at retail level. The PTA considered it necessary to facilitate the entry of independent service providers to the relevant markets and to ensure that electronic communication companies already operating there could compete with Síminn Group under normal competitive conditions. In order to ensure that the price for access would be fair and natural and cost-based, the PTA considered it necessary to impose a requirement on Míla regarding the monitoring of lists of tariffs, both with regard to copper and fibre-optic local loops.

It was stated in paragraph 69 in the aforesaid additional consultation document that the PTA had in the preliminary draft assessed the factors that needed to be present in accordance with the aforesaid European Commission recommendations of 2013 in order to for it not to be justified to impose a price control obligation with regard to fibre-optic networks. *Firstly* it had been assessed whether a "copper anchor" existed, but it was the cost-analyzed wholesale copper network access that kept back the prices for the next generation of service (NGA service) in the manner that the NGA service would be priced in accordance with the will of consumers to pay for additional transmission capacity and activity which the retail service, that was based on a NGA network, could provide compared to a retail service based on a traditional copper network. In paragraph 73 it was stated that *secondly*, competition from other networks could lead to the same conclusion. A more detailed discussion of this requirement will follow in the comments submitted by interested parties below. In paragraph 75 it was also stated that *thirdly* there had to be Equivalence of Input (EoI), which has applied to Míla's fibre-optic networks since 2014. It was stated in paragraph 76 that in the preliminary draft the PTA had based its arguments among other things on statements from the competitors of Síminn Group to the effect that Míla was underpricing its fibre-optic local loops, yet the PTA did not actually have conclusive evidence of this. In paragraph 77 the PTA had accepted the arguments submitted by Síminn Group that a considerable amount of time would pass until fibre-optics had been installed for

the entire country, and therefore the PTA considered it proper to avoid imposing requirements that could compromise the goals for the installation of fibre-optics for the country, if this was possible. It was furthermore stated in paragraph 78 that in addition to the aforesaid items which the PTA had reassessed, certain factors with regard to the situation on related markets had changed somewhat since the publication of the preliminary draft, such as Síminn's agreement regarding bitstream access to GR's fibre-optic network of July 2020, and that access to Síminn's television content had been made easier than before, and therefore Síminn Group's control of television content was not as influential a factor in the group's market power as previously.

With regard to the aforesaid comment from the Competition Authority regarding "copper anchor", which as aforesaid was one of the reasons for the PTA's reassessment of the imposition of the aforesaid requirement of a cost-analyzed list of tariffs for Míla's fibre-optics network, the following was stated in paragraphs 70-72 in the additional consultation document.

"70. The PTA considered that there were indications that the price for access to copper local loops did not function as a copper anchor in this country, among other things because the price offered to consumers by the largest telecommunications companies were entirely independent of the speed of transmission of the internet service offered. In reality, most of the connections that users were purchasing would be categorised as high-speed Internet (over 30 Mb/s), which is the definition for the next generation networks (NGA). Consumers therefore did not have the option of less expensive legacy copper network connections, as is the case at many locations in Europe. Also, the retail price for local loop lease (line charge/access charge) had been moving away from the cost-analysed price for copper local loops, and therefore it seemed that they did not act as a copper anchor for retail products. In the opinion of the PTA, it was still not unlikely that the price of copper local loops had some impact on the market, although it was not possible to demonstrate this with any certainty. The PTA also considered it likely that the effect of copper prices was diminishing during the time of validity of the analysis because of switching to fibre-optic local loops.

71. After reviewing its arguments in support of the lack of a copper anchor, with reference to the comments submitted and recommendations 2013/466/EU, the PTA concluded that the institution had underestimated the effects of the cost-analyzed price of copper local loops. It was clear that the retail price for fibre-optic network followed the retail price of copper network, as the telecommunications companies did not make a distinction between the underlying networks when pricing their retail service. Even though the retail amount of the line charge had been increased beyond the increase in the wholesale amount of the local loop charge, it was proper to also take into account the price formation when it came to retail packages in their entirety. The price of service packages had generally not increased proportionally in the same way as the line charge. Copper local loops still accounted for just under 70% of the total number of Míla's local loops actively being leased, and therefore represented a considerable part of the market.

72. The consumer survey which the PTA had commissioned in October 2020 had indicated among other things that a large part of consumers were prepared to switch to Ljósnet (i.e. VDSL copper local loop) if the price for optical network packages (FTTH) was increased by about 10%. It had also been discovered that speed was generally not the determining factor when it came to selecting internet service. This supported the conclusion that cost-analyzed connections over copper local loops could have a restraining effect on retail service provided by fibre-optic cable."

As aforesaid, the Competition Authority considered it proper to state regarding the effect of bundles on the assessment of a potential copper anchor in the pricing of these wholesale products, [...] In light of the aforesaid, the Competition Authority was of the opinion that a smaller-scale increase in the price of bundles should have limited significance in this context

when it came to the assessment of the existence of a copper anchor, and whether the requirements of the aforesaid recommendations were satisfied, especially with regard to local loop market 3a.

It is the assessment of the PTA that the aforesaid comment from the Competition Authority regarding the effect of bundles on the assessment of the possible existence of a "copper anchor" and [...] does not alter the aforesaid assessment made by the PTA, as the principal argument submitted by the PTA had been to refer to the fact that the retail price for fibre-optic network followed the retail price for copper network, as the telecommunications networks did not make a distinction between the underlying network in the pricing of their retail service. The PTA also holds fast to its statement that even though the retail amount of the line charge had increased beyond the increase in the wholesale amount of the local loop charge, it was proper to also consider price formation for retail packages in their entirety, which had generally not increased proportionally in the same way as the line charge. The fact that Síminn does not make a distinction in retail between local loops by capacity, as is widely done in other countries, makes it more difficult to determine whether a copper anchor exists. Síminn also does not make a distinction with regard to line charges even though the underlying fibre-optic local loop is priced differently by areas.

With regard to Síminn's collection of a local loop charge for fibre-optic local loops in rural areas, this is only 15%, despite the fact that it is in fact more expensive to service local loops in rural areas due to the cost involved with leased lines and hosting. It is therefore highly likely that if there was not a single line charge independent of the underlying local loop, the line charge for fibre-optic local loops in rural areas would be higher than the present line charge. Copper local loops are still the majority of Míla's leased local loops, a significant part of the market which is likely to have an effect on price formation with regard to substitute products in the market during the time of validity of this market analysis. The PTA furthermore refers to paragraph 74 in the additional consultation document, wherein it was stated that the PTA considered, in light of the dominant arrangement in the EEA Area, where the most common course of action was to impose less severe requirements for fibre-optics in accordance with the aforesaid EU Commission recommendations of 2013, that it was proper not to require an overly strict assessment of the existence of the aforesaid conditions, i.e. the possible existence of a copper anchor and competition from other NGA networks. It was clear that both of these factors were present to some extent, and the PTA considered this sufficient to reach the conclusion that it was proper to require ERT tests instead of cost-oriented prices for Míla's fibre-optic network, at least for the time being.

Nova referred to the discussion about copper anchor in paragraph 70 in the additional consultation document, wherein it was stated that consumers were not benefiting from the lower price for copper connections. Nova was of the opinion that the reasons were that a considerable number of customers still used these connections, both in areas where other options were available and where they were not. Consumers considered it natural that the price for copper connections would then decrease in all areas, irrespective of whether other options were available in them or not. [...].

The PTA's position

Nova submits no comments regarding the PTA's conclusion that a copper anchor exists, but rather attempts to explain why it exists. In the PTA's assessment, the aforesaid comment therefore supports the PTA's conclusion in this regard.

Nova referred to the PTA's discussion of copper anchor in paragraph 71 in the additional consultancy, and pointed out that [...].

The PTA's position

Nova submits no comments regarding the PTA's conclusion that a copper anchor exists, but rather attempts to explain why it exists. In the PTA's assessment, the aforesaid comment therefore supports the PTA's conclusion in this regard. It is comment worthy that Nova maintains here that [...].

The Competition Authority referred to the PTA's conclusion regarding paragraph 73 regarding the second requirement according to the recommendations of 2013, that competitive pressure from other networks can be sufficient to hinder a party with considerable market strength (Síminn Group) from requiring excessive retail prices. The Competition Authority considered it proper in this context to repeat what had been stated in the PTA's preliminary draft regarding that price variation between Síminn's line charge and the wholesale price of local loop access had in recent years frequently proved to be considerable. The following was stated in the PTA's preliminary draft:

" ... that it is clear that Siminn's markup on line charge for copper local loops in recent years is measured in tens of percentage points, and even up to just over 100%." The markup is somewhat less in the case of fibre-optic local loops yet still somewhat generous. Today the difference is 26% based on the capital area and Akureyri, and about 47% for other areas. This difference is however not reflected in retail prices of telecommunications companies by geographic areas. Given the available wholesale and retail prices within Síminn Group and the number of users, it can be roughly estimated that Siminn's markup on line charge amounts to billions of ISK in recent years."

The Competition Authority could agree with the PTA's decision regarding the generous markup in Síminn's line charge and the positive performance from line charges. As it was stated in the preliminary draft, the Competition Authority was investigating Síminn's mark-up and collection of line charges for the resale of local loops, subsequent to complaints lodged by GR. [...].

Even though line charges were an inevitable part of providing an active connection to the end user, cf. paragraph 33 in the PTA's preliminary draft, and despite the fact that there was some discussion of the price trends involved with access charges in the market analysis the aforesaid factors indicated that access charges were no longer levied for the only purpose, or main purpose, of covering the wholesale cost of the access network underlying the internet service. Síminn had also argued that the resale of local loops constituted a competitive market with free pricing for the purpose of achieving a return on shareholders' funds, and the same was true for the company's other retail products. In fact, the Competition Authority was of the opinion that the retail market for fixed access/resale of local loops was assigned less importance in the market analysis compared with the defined market for broadband access (internet service) at the retail level, especially in light of the potential competition disruptions that seemed to be present at the retail level of the local loop market. This was mentioned here as the difference between the wholesale and retail price of Síminn Group's local loops were assigned less importance in the PTA's additional consultation document, among other things with regard to the trends in the price of bundles.

The PTA's position

In the additional consultation document, the PTA discussed the competitive pressure from other networks in paragraph 73. This included the following:

"Another condition that in accordance with recommendation 2013/466/EU could lead to there being no stipulation for cost-analyzed prices for fibre-optics was competition from other networks. It was clear that fibre-optics networks existed that were not under the control of Míla or Síminn Group in the operating areas of GR, Tengir and Snerpa and in areas where state-aided networks in rural areas were not operated by Míla. However, each area only had one other access network, except in Reykjanesbær, where Kapalvæðing operated a cable system. In the preliminary draft, the PTA had considered it possible that the monthly prices on offer for those networks might constrain Síminn's retail prices for Internet connections supplied by fibre-optic cable. As stated in the PTA's geographical analysis, a greater degree of competitive pressure seemed to exist in some areas where other fibre-optic networks had been installed. The PTA on the other hand did not consider the competitive pressure in those areas to be sufficient to justify separate geographical markets (only different requirements by area), as only one competitor was present in each area and the competitive conditions were not "significantly" different from one area to another, as Síminn had been adding to its market share in these areas in recent seasons. In the assessment of the PTA, the aforesaid competitive pressure was not sufficient to consider there to be effective competition at the wholesale level, yet it could be sufficient to prevent a party with significant market power from demanding excessive retail prices. It should be kept in mind that Míla's fibre-optic local loops were mostly either in competition areas or subject to rules governing state sponsorship, and therefore some factors restrictive to pricing had to be present."

The PTA stands by its statement that competitive pressure from other networks can be sufficient to prevent Síminn Group from demanding excessive retail prices for fibre-optic connections in this market. The PTA does not see that the Competition Authority disagrees with this conclusion of the PTA in the aforesaid comments. Neither Síminn nor other large-scale retailers apply different pricing depending on whether the connection is provided by a copper or a fibre-optic connection. This both applies to line charges on the retail market for fixed access/resale of local loops and the broadband service provided over such local loops. The PTA does not agree with the Competition Authority that the PTA had assigned little importance to the retail market of fixed access/resale of local loops in its analysis. The PTA discussed Síminn's line charge in detail and described it as a competition problem. This is confirmed by the aforesaid comment from the Competition Authority. On the other hand, the PTA considers the ERT requirement to be satisfactory for the time being, at least to address the competition problem caused by the group's pricing.

GR referred to Section 4.9 in the additional consultation document, where the PTA among other things mentioned the reasons for the reassessment of the intended requirements that were to be imposed on Míla's list of tariffs in connection with fibre-optics. The PTA had referred to certain factors that in accordance with Recommendation 2013/466/EU needed to be present in order for it to be considered unnecessary to apply a price control obligation with regard to fibre-optic networks.

Firstly, the PTA referred to that it had been examined whether a so-called "copper anchor" existed, which in fact was based on the premise that the price of copper would control the formation of prices for NGA serviced provided by fibre-optics. The PTA considered that insufficient importance had been assigned to the effects of the cost-analyzed price for copper local loops. The PTA pointed out that there was not difference in the price for services provided by copper or fibre-optics.

GR pointed out in this regard that the actual figures on the market indicated that for quite a long while, nearly since the day when GR was founded, the price for copper and fibre-optic

connections had remained the same and it did not seem likely to change in the foreseeable future.

If no requirement was imposed regarding the list of tariffs for fibre-optics, GR considered it to be evident that Síminn Group would find it to its advantage to put pressure on its customers to switch to fibre-optics, through other means than raising the price of copper, such as with various vertically integrated package offers and bundles, like Síminn and Míla had been doing to a considerable extent these last years. Thus, Síminn Group could over a relatively short period of time cause a large part of its customer base to switch to fibre-optic network without any restrictions, and consequently find it easy to undercut the price of fibre-optic local loop and take advantage of the group's strength on downstream markets, and thereby eliminate competition on the market for fibre-optic connections. As stated in the reply from GR dated 22 October 2020 to the PTA's inquiry, this was already happening. This would be contrary to the intent of the Electronic Communications Act by imposing restrictions on dominant companies to counteract the creation of competitive problems due to the structure of the market. The vertical integration of Síminn and Míla was precisely a problem connected with the structure of the market.

Secondly, the PTA considered that according to the MMR consumer survey there was substitutability between optical network and fibre-optics in the mind of consumers, and they would switch their internet service from fibre-optics to copper if a 10% permanent increase in the price of fibre-optics would occur. From this the PTA had concluded that cost-analyzed connections over copper local loops could have a restraining effect on retail service provided by fibre-optic cable. This was true to a certain extent. However, experience and data on the market indicated that other factors resulting from the vertical integration of Síminn and Míla had a much greater influence on consumers when it came to deciding whether to switch from fibre-optics to copper. These factors included the bundles and package offers that Síminn Group made available to consumers. The MMR survey indicated that few consumers paid much attention to whether they were using copper or fibre-optics. Síminn Group's name for the copper connection which the companies used in their marketing efforts on the consumer market, "*Ljósnet*" (*optical network*) was misleading in and of itself. There were other factors of far greater influence, such as offers for television service, mobile subscriptions, data volume and Internet access. These would be the determining factors, not access charges for copper or fibre-optic cable, as the price of these accounted for less than 1/3 or 1/5 of consumers' total business.

GR therefore considered it an overestimation on the PTA's part to consider the price of cost-related connection over copper local loop, in and of itself, to be a determining factor that had a restrictive effect. The price of the local loop was actually an insignificant factor and most likely consumers would not even consider it when assessing their options, as it could not be seen to have any effect at all when it came to consumers' speed and quality requirements.

Thirdly, the PTA stated that the speed of connections was of little importance to consumers in their selection of local loop, irrespective of whether it was provided by copper or fibre-optic cable. This led to the same conclusion discussed earlier.

Fourthly, the PTA had pointed out the condition in the recommendations that could result in there being no requirement for cost-analyzed prices for fibre-optic cable, i.e., competition from other networks. The PTA concluded that there was insufficient competitive pressure from other networks.

In GR's assessment the decision not to impose a price control obligation on Síminn Group's list of tariffs for its fibre-optic network would result in a delay of many years or decades before it was possible to install another fibre-optic network for the entire country that was sufficient to provide active competition with Síminn Group's fibre-optics network or would prevent it from happening altogether. The position whereby Míla was able during the time of validity of the intended market analysis to build up a fibre-optics network without price control obligations applying to the list of tariffs would have the effect that Síminn Group would be highly motivated to arrange the pricing of fibre-optic access at its own convenience within the group, and possibly reach the position of being able to exploit the vertical integration to the fullest, e.g. either price fibre-optics at its sole discretion without any competitive pressure, or subsidize access or sell it at near-cost price while achieving profitability through other vertically integrated services and activities. This would place other competitors, i.e., those who were not vertically integrated in the wholesale and retail markets, in an unwinnable position in the competitive market.

The PTA's position

The GR stated, in connection with the PTA's conclusion that a copper anchor existed, that the actual figures on the market had for a long time indicated that the price of copper and fibre-optic connections had remain the same and this was not expected to change in the future. The PTA considers this to support its assessment that a copper anchor exists.

GR stated that if no requirement was imposed regarding the list of tariffs for fibre-optics, it was evident that Síminn Group would find it to its advantage to put pressure on its customers to switch to fibre-optics, through other means than raising the price of copper, such as with various vertically integrated package offers and bundles, like it had been doing to a considerable extent these last years. Thus, the group could over a relatively short period of time cause a large part of its customer base to switch to fibre-optic network without any restrictions, and consequently find it easy to undercut the price of fibre-optic local loop and take advantage of the group's strength on downstream markets, and thereby eliminate competition on the market for fibre-optic local loops. This would be contrary to the intent of the Electronic Communications Act by imposing restrictions on dominant companies to counteract the creation of competitive problems due to the structure of the market, including the effect of the group's vertical integration.

The PTA is of the opinion that Síminn Group on the contrary would benefit from using its copper local loops for as long a time and to as great an extent as possible, among other things because Síminn's margin on-line charges is far greater for copper networks than fibre-optic networks. This will apply for as long as there is substitutability between these networks, but as aforesaid the PTA considers this to be still the case and will remain so at least for the lifetime of this analysis. Míla also does not possess as extensive a fibre-optic network as the company's competitors combined. It is clear that it will take time for Míla to get to the same level as its competitors when it comes to this roll-out. As stated in the PTA's analysis, there are a great many examples of Síminn Group getting customers who have been using the competitors' fibre-optic networks to switch to the company's copper network in recent years, and this development seems to continue unabated. Síminn Group achieves this with a popular bundle, the household package, which includes popular television content. Yet it is likely that the effect of this problem will diminish when the agreement between Síminn and GR is implemented, and also if Síminn reaches an agreement with Tengir regarding bitstream access to Tengir's fibre-optic network.

As elaborated further in the analysis and at a later stage in this document, the PTA has no irreversible proof that Míla has engaged in underpricing of its fibre-optic local loops or the bitstream service provided over such networks.

The PTA considers the ERT requirement to be adequate, at least at the present moment, to strengthen competition in the relevant wholesale markets and the related retail market, as elaborated further in the PTA's analysis and above. Therefore, the imposition of a requirement for a cost-analyzed list of tariffs for Míla's fibre-optic network would be excessive in the PTA's opinion, given the current situation. The PTA therefore considers the aforesaid ERT requirement instead of the cost-analysis requirement for Míla's fibre-optics not to be inconsistent with the intent of the telecommunication regulatory system. If new conditions should arise in the market that pose a serious threat to competition in telecommunications infrastructure, the PTA can intervene with a new analysis which could include the option of requiring a cost-analyzed list of tariffs for Míla's fibre-optics. In order to implement this, it may be necessary to identify clear signs of more serious competition problems than currently exist on the relevant markets.

GR expressed agreement with the PTA's substitutability assessment insofar as it reached, and that cost-analyzed connections over copper local loops could have a restrictive effect on retail service provided by fibre-optics. However, experience and data on the market indicated that other factors resulting from the vertical integration of Síminn had a much greater influence on consumers when it came to deciding whether to switch from fibre-optics to copper, such as the bundles and package offers which the group made available to consumers. The MMR survey indicated that few consumers paid much attention to whether they were using copper or fibre-optics. The group's name for the copper connection which the companies used in their marketing efforts on the consumer market, i.e., optical network (Ljósnet), was misleading. There were other factors of far greater influence, such as offers for television service, mobile subscriptions, data volume and Internet access. These would be the determining factors, not line charges for copper or fibre-optic cable, as the price of these accounted for less than 1/3 or 1/5 of consumers' total business. GR therefore considered it an overestimation on the PTA's part to consider the price of cost-related connection over copper local loop, in and of itself, to be a determining factor that had a restrictive effect. The price of the local loop was actually an insignificant factor and most likely consumers would not even consider it in when assessing their options, as it could not be seen to have any effect at all when it came to consumers' speed and quality requirements. The same could be said about the speed of the connection.

GR's aforesaid statement supports the PTA's substitutability assessment, which is further elaborated in the PTA's updated analysis (Appendix A), Sections 3 and 4 in Appendix B and in Sections 2 and 3 above. It also detracts from the importance of the comment from the Competition Authority described above, to the effect that the PTA did not devote enough attention to the line charge in its analysis. The PTA agrees that the aforesaid conduct on Síminn's part is in support of the view that the aforesaid substitutability between copper and fibre-optics networks and the price of the local loop (line charge) are not determining factors when it comes to consumers' choices, as this is only a small part of consumers' total cost in connection with telecommunication service, and in many cases also television service. Furthermore, it was concluded in the MMR consumer survey that was conducted on behalf of the PTA that the speed of connections also was not a determining factor for consumers' choices.

Finally, it was stated in the aforesaid comments from GR that it was the company's assessment that the PTA's decision not to impose a requirement for a cost-analyzed list of tariffs for Míla's

fibre-optics would result in a delay of many years or decades before it was possible to install another fibre-optic network for the entire country that was sufficient to provide active competition with Síminn Group's fibre-optics network or would prevent it from happening altogether. The situation that Míla could during the lifetime of the analysis build up a fibre-optics network without the tariff requirement would result in a great incentive for the group to arrange the pricing of fibre-optics access entirely at its own convenience, which would place the group's competitors, i.e., those that were not vertically integrated like the group, in an unwinnable position.

The PTA states that there have been no requirements for a cost-analyzed list of tariffs for Míla's fibre-optics. Undeniably companies such as GR and Tengir have achieved considerable success in spite of this, both as regards the extensive roll-out of fibre-optic networks and operational success. At the same time Míla has greatly expanded its fibre-optics network, in the last five years or so. In light of this and other factors, and with reference to the previous answers given earlier, the PTA considers it to be an appropriate course of action at this point to require Síminn Group to pass ERT tests, which will have a restrictive effect on the group with regard to the pricing of fibre-optic local loops that up until now has not been the case for the group. Such a requirement will also give the group more leeway when it comes to pricing than would be the case if a requirement for a cost-analyzed list of tariffs for fibre-optics was imposed and should therefore not result in any delay in the installation of fibre-optics in areas where this remains to be done, on commercial grounds. It may be necessary to apply government grants in areas where market failure exist. The PTA also intends to elaborate a requirement for Míla regarding other parties' access to the company's ducts and conduits in such areas, which can also expedite the installation of fibre-optics in those areas. The PTA therefore does not agree that imposing an ERT requirement at this point will place Míla's competitors in telecommunications infrastructure in an unwinnable position.

Nova pointed out regarding the discussion of competitive pressure in paragraph 73 of the additional consultation document that there was insufficient competitive pressure. In general, this applied especially to the aforesaid market in Iceland, where 1-2 parties made general offers for service and where others might be present (very few areas with 2-3 parties). In Reykjanes the third party (Kapalvæðing) did not have the technical capacity required to be an active participant as a wholesaler for an active retail market.

The PTA's position

The PTA considers Nova to be in agreement with the PTA regarding insufficient competitive pressure to conclude that separate geographical markets should be defined for this country, nor that active competition is present. Still, the PTA does not see that the aforesaid comment is inconsistent with the PTA's assessment that competition exists from networks other than Míla, so as to justify the imposition of an ERT requirement instead of requiring a cost-analyzed list of tariffs for Míla's fibre-optics.

The aforesaid comment from Nova also supports the PTA's conclusion that Kapalvæðing, which operates its own cable network in Reykjanesbær, is not a sufficiently strong participant to justify separating that municipality geographically from other areas.

GR referred to the PTA's intent not to require cost-analysis but rather apply so-called Economic Replicability Tests, which are described to some extent in the additional consultation document, but mainly reference was made to the BEREC guidelines regarding the content and subject

matter thereof, without any actual comparison of the effect of these two methods having been submitted in the opinion of the GR. In the assessment of the GR it had to be concluded that the PTA had to some extent accepted the arguments submitted by Síminn Group to the effect that less severe requirements should be applied, in the form of Economic Replicability Tests instead of cost analysis, as the PTA had proposed, without it being clear that this method would actually ensure the attainment or guarantee of the objectives which the PTA was entrusted with guarding in accordance with Sections V and VII of the Electronic Communications Act.

The PTA's position

GR is right to state that this analysis does not include a precise elaboration of the ERT requirement or the implementation of the test. Consequently, to this decision, the PTA will elaborate the requirement in a more precise manner in a special decision, following national consultation and consultation with the European Supervisory Authority and other telecommunications regulatory authorities in the EEA area. In this the PTA will rely as much as possible on the aforesaid recommendations from the European Commission of 2013 and the BEREC guidelines of 2014 on ERT tests, with due consideration of the conditions that exist in this country. When that decision has been made, the PTA will implement regular ERT tests. This arrangement is similar to that adopted by Nkom in Norway some years ago. The PTA acknowledges that it would have been more advantageous to further elaborate the ERT test in this decision, but this would have delayed the revision of the market analysis, which has already been going on for more than 6 years, by many months.

The PTA has, in the updated preliminary draft (Appendix A) and in the previous responses, submitted arguments to support why the PTA decided to abandon the original intent indicated in the preliminary draft regarding the imposition of the requirement for a cost-analyzed list of tariffs for Míla's fibre-optics, and instead require Síminn Group to undergo ERT tests. See the relevant sections.

As regards the comparison of the two methods, it may be mentioned that a certain middle way must be adopted between the objectives according to the Electronic Communications Act, i.e., to promote active competition on one hand and encourage further roll-out of fibre-optics networks on the other. The PTA considers the ERT test to be a better way to promote rapid roll-out of fibre-optics networks in Iceland than the cost analysis requirement. As aforesaid, the PTA also considers that the ERT requirement should be adequate along with the other requirements which the PTA intends to impose on Míla to strengthen competition in the relevant wholesale markets and the related retail market in light of the state of competition in this country. This is a new requirement for Síminn Group, which has not been in effect before, and therefore the PTA must as always ensure that the imposition of requirements does not exceed what is necessary.

Nova referred to paragraph 74 in the additional consultation document, wherein it was stated that the PTA considered, in light of the dominant arrangement in the EEA Area, where the most common course of action was to impose less severe requirements for fibre-optics in accordance with the aforesaid EU Commission recommendations of 2013 regarding non-discrimination obligations and costing methodologies, that it was proper not to require an overly strict assessment of the existence of the aforesaid conditions, i.e. the possible existence of a copper anchor and competition from other networks. It was clear that both of these factors were present to some extent, and the PTA considered this sufficient to reach the conclusion that it was proper to require ERT tests instead of cost-analyzed prices.

Nova pointed out regarding the ERT test that the elaboration of the aforesaid implementation would be very important with regard to ensuring whether the actions that resulted from the tests would be adequate.

The PTA's position

The PTA agrees with Nova that the further elaboration of the ERT test is important to ensure that the actions which the PTA may have to take consequently to the implementation of the test, if Síminn Group should fail the test, will effectively promote increased competition.

Síminn referred to the PTA's intention to impose an ERT requirement on Síminn, seemingly in all areas of the country and irrespective of whether Síminn was using Míla's local loops or not. There was no elaboration of this requirement, and Síminn pointed out that onerous government decisions needed to be clear and understandable.¹⁴ The PTA's intended decision did not satisfy these conditions, and therefore the requirement would need to be elaborated in the same decision whereby the requirement was imposed.

Síminn was not dominant on the market for internet service, and the PTA had carried out no analysis to find out whether Síminn had achieved dominant status. Also, it was nowhere addressed to what market the requirement should apply or to what service, but it was stated that this would be done later. Therefore, the situation could arise that the requirement would not be actually imposed until the time when the PTA would be obliged to complete a new market analysis. Clearly this open and random methodology applied by the PTA was not working.

With regard to economic replicability, it was a prerequisite that the relevant companies were dominant on a specific wholesale market, and that the product or service in question was generally regarded as a necessary resource. This was not the case.

The PTA's position

The PTA points out that no other interested party is maintaining that the institution cannot take this course of action in imposing an ERT requirement on Míla and Síminn, i.e., to generally require Míla and Síminn to pass ERT tests, including Míla, to which the aforesaid requirement will apply as well as to Síminn. In its comments on the preliminary draft, Míla and the company's consultant, Analysys Mason (AM), pointed out among other things that the imposition of the aforesaid ERT test on Míla and Síminn was a much more natural course of action than the imposition of a requirement for cost-based prices for Míla's fibre-optics. Nkom in Norway adopted this course of action among others a few years ago, and further elaborated the ERT test in a special decision following a market analysis. The PTA has also for years been reviewing Míla's cost analyses and determining prices by specific decisions, and the same is true for various items in Míla's reference offer. Also, the aforesaid requirements, i.e. the requirement for monitoring lists of tariffs and the transparency requirement, have been described generally in the market analysis and their further elaboration has then taken place in specific, derived decisions, and the drafts of such decisions are submitted for national consultation and consultation with the European Supervisory Authority and other telecommunications regulatory authorities in the EEA area, before they become final decisions.

¹⁴ "It is a fundamental rule in administrative law that government decision must be clear enough for the relevant party to be able in each instance to assess what effect the decision has on that party's legal position." Opinion of the Parliamentary ombudsman no. 4315/2005.

In Section 4.1.10 in the additional consultation document the aforesaid ERT requirement is described in general terms. There is also a more detailed description of the requirement in Sections 10 and 11 in the updated market analysis (Appendix A). In paragraph 83 of the additional consultation document, it was stated that regarding the wholesale access to fibre-optic cables in the relevant markets that were not intended to be subject to a cost-analysis obligation, the PTA considered it proper that Míla was subject to an obligation for fair and reasonable pricing without discrimination. In paragraph 84 it was then stated that furthermore, Míla and Síminn should be subject to an obligation that care would be taken that the difference between the price of wholesale procurements and the retail price for the most important subscription plans containing internet access, would not be too small. According to paragraph 85, the companies would also be prohibited from applying harmful underpricing on the wholesale and retail level in the relevant and related markets. According to paragraph 86, Míla would nevertheless be granted leeway in pricing in order to promote increased use of investments in fibre-optic connections. According to paragraph 87, Síminn would be required to ensure that the most important subscription plans that included internet connections were priced in a natural manner and so that there was no margin squeeze between retail prices and wholesale procurements. According to paragraph 88, the companies would then be required to provide the PTA with all necessary information to verify that wholesale and retail pricing was in accordance with the above.

According to paragraph 89 in the aforesaid additional consultation document, the PTA intended after the completion of this market analysis to immediately begin preparations for determining the elaboration and introduction of ERT tests, in order to monitor that the difference in wholesale and retail prices within the group was not unduly small, so that Síminn Group's competitors could emulate the major retail offers made available by Síminn.

It was stated in paragraph 90 that the PTA intended to engage in consultancy regarding further elaboration of the ERT test, and it was clear that the institution would refer to the aforesaid EU Commission recommendations of 2013, and the BEREC guidelines of 2014 concerning ERT tests, when defining the factors that should be taken into account regarding the test. An obligation to undergo an ERT test and provide all necessary information would be imposed on Míla and Síminn.

Finally, it was stated in paragraph 91 of the aforesaid consultation document that if, at any point, Míla and Síminn did not pass the ERT test that would be implemented and did not immediately remedy deficiencies, e.g. by Síminn raising the retail price or Míla lowering the wholesale price, or Míla violated the obligation of Equality of Input (EoI) then it could be expected that the PTA would have to make a decision to impose stricter requirements, such as cost-analysed prices for Míla's fibre-optic connections.

It is clear that for parties such as Síminn Group, which employs lawyers and various specialists, and frequently procures the services of consultants, it should not be hard for neither Síminn nor Míla to understand what the aforesaid ERT requirement entails. It is described in detail in the aforesaid EU Commission recommendations of 2013 and the BEREC guidelines of 2014, and in addition there is considerable implementation in place in the EEA Area when it comes to the elaboration and application of such tests. The PTA therefore considers the description of the ERT requirement in the additional consultation document to have been sufficiently clear for Síminn to understand what effects the requirement would have on the company. The principal factor is that the difference between Míla's wholesale price and Síminn's retail price is sufficient for Síminn Group's competitors to be able to compete within said difference. Considering that

Míla makes no comment regarding this requirement, it seems that this part of Síminn Group understands what the aforesaid requirement entails.

Síminn stated that the PTA seemed to intend to impose an ERT requirement on Síminn, seemingly in all areas of the country and irrespective of whether Síminn was using Míla's local loops or not. Síminn is correct that the PTA intends to impose on Síminn and Míla a requirement that the companies shall pass ERT tests. This applies to the entire country, where Síminn uses Míla's fibre-optic local loops or access to Míla's bitstream service provided by fibre-optic cable. In the decision which the PTA will make after this market analysis regarding the elaboration of the ERT test it will be determined, following national consultation and consultation with the European Supervisory Authority and other telecommunications regulatory authorities in the EEA area, whether the requirement will also apply in cases where Síminn purchases bitstream access from unrelated parties, such as GR and Tengir. It also remains to elaborate, in that decision, if the group will be authorized to factor in the higher costs and smaller scale economics inherent in providing service in rural areas.

Síminn stated that the company was not dominant on the retail market for internet service, and that the PTA had carried out no analysis in that regard. Also, it was nowhere addressed to what markets the requirement should apply or to what service, but it was stated that this would be done later.

In Section 3.2.5 of the preliminary draft, entitled "Definition of the relevant service market at the retail level", it is stated in paragraph 186 that a retail market based on wholesale service in markets 3a and 3b entails connections at a fixed user site which makes it possible for users to connect to the internet. According to paragraphs 187 and 192 this applies equally to connections provided by copper or fibre-optics networks. The ERT requirement will therefore apply to the aforesaid retail market and for the relevant wholesale markets 3a and 3b.

In Section 3.2.6 of the preliminary draft, entitled "Competition in retail markets, the conclusion was that it was evident that there was no active competition on the relevant retail market in this country, despite the requirements imposed on Míla in the relevant wholesale markets. As stated in the explanatory comments to the EU Commission recommendation on the relevant markets, it shall be assessed before wholesale markets are defined, whether there would be effective competition at the retail level if no obligations were imposed on the underlying wholesale markets. The aforesaid analysis of the relevant retail market, included in Section 3 of the updated preliminary draft (Appendix A), this should only entail an assessment of whether active competition exists there or not, and not such excessive steps as designating companies with significant market power on the market. This should only be done in exceptional circumstances, i.e. if it is clear that the requirements imposed on the relevant wholesale markets are not sufficient to create active competition in the relevant retail market. The PTA does not consider it to be time to analyze the aforesaid retail market any further under the present conditions.

However, the conclusion may be made that since there is no effective competition in the aforesaid retail market there is one or more companies with significant market power on that market. The PTA considers there to be no indications of joint market dominance in the aforesaid retail market, but rather that in all likelihood Síminn enjoys significant market power there, even though the PTA has not designated the company as such for the reasons given above. In paragraph 196 in the preliminary draft, it is stated among other things that Síminn Group's strong position on the retail market, where the company's market share was just under 50%, and Míla's strong position on the relevant wholesale markets, were clear indications that if there

were no wholesale requirements the Group would be able to operate without having to take competitors or consumers into consideration, and could maintain access barriers to infrastructure, systems and service. Significant influential factors would have to come into play in order to prevent such a market share from leading to the company to attain dominant status on the market. The strong vertical integration of Síminn and Míla further strengthens Síminn's position on the relevant retail market.

Considering the aforesaid, it is not the case that the PTA needs to designate Síminn as a company with significant market power in the relevant retail market in order to be able to designate the company as having significant market power along with Míla on the relevant wholesale markets and impose the relevant ERT requirement on the companies. It is clear that this requirement would not be effective nor successful unless it also applies to Síminn.

Síminn stated that the situation could arise that the requirement would not be actually imposed until the time when the PTA would be obliged to complete a new market analysis. Clearly this open and random methodology applied by the PTA was not working.

The PTA does not agree that the institution needs to perform a new market analysis in its entirety in order to be able to elaborate the ERT test further. As aforesaid, the PTA considers that this can be done through a specific decision, on which work, and consultation will commence soon after this market analysis. However, the next analysis of the relevant markets is not scheduled until 3 years from now, unless conditions in the market or amendments to legislation should warrant otherwise.

Síminn stated that with regard to economic replicability, it was a prerequisite that the relevant company was dominant on a specific wholesale market, and that the service in question was generally regarded as a necessary resource. This was not the case.

In its analysis, the PTA has reached the conclusion that Míla has significant market power in both the relevant wholesale markets analyzed here. Míla and Síminn then form a single economic unit in the sense of competition law. The service which Míla provides can be a necessary resource in the operations of unrelated service providers. The PTA therefore considers it necessary to impose on Míla all the requirements listed in the analysis, and an ERT requirement on both Míla and Síminn, in order to promote strong competition in telecommunications in this country.

It would have been preferable if the PTA had been able to elaborate the aforesaid ERT requirement in a more precise manner in this market analysis, so that subsequently it would not have been necessary to make another decision regarding the elaboration, before the actual testing could begin, but in light of the long duration of the implementation of the aforesaid market analysis, its level of complexity, the great volume of comments submitted by interested parties and other factors, the PTA considers that its realization cannot justifiably be postponed any further than it has been already. After that, the PTA will devote its efforts to drafting a decision whereby further elaboration of the test will be stipulated and consultation will take place regarding the testing, before the final decision will be realized.

Síminn pointed out that the PTA intended to make another decision whereby the requirement would be elaborated. In other words, the PTA intended to make an administrative decision regarding Síminn's rights and obligations, which was so unsatisfactory that it would require another administrative decision in order to elaborate the obligations.

Ósiminn objected to this, stating that the PTA could not impose open and onerous requirements that were to be elaborated later. It was a prerequisite of the administrative decision that the elaboration of the requirement would be provided in that same administrative decision in order for Ósiminn to be able to assess the effects and scope of the obligations that would apply to Ósiminn subsequently.

It was entirely unacceptable that this was being split into two parts, and Ósiminn pointed out that 1-2 years could pass from the decision before the requirement was imposed on Ósiminn, and then it would enter into effect immediately, and then Ósiminn would be expected to wait several seasons to find out what the aforesaid obligations entailed. If it was assumed that the lifetime of the analysis would be 2-3 years, it was clear that when Ósiminn finally knew what the requirement entailed a new market analysis should be available. A process of this kind was clearly not acceptable.

For example, Ósiminn might need to appeal the decision to impose the requirement without being able to explain what that requirement entailed. It was clear that a higher authority would annul such a decision and require the PTA to stipulate the rights and obligations in that single decision.

The PTA would therefore have to arrange for additional consultation that would involve a thorough review of what was entailed by the requirements which the PTA intended to impose on Ósiminn, and only then it would be possible to make the onerous decision that could then be appealed to a higher authority. The requirement and the elaboration were so closely linked that it would not be possible to address them in two separate decisions.

It was also evident that if the PTA imposed a requirement of this kind on Ósiminn then obviously the Competition Authority would have to annul Decision no. 6/2015.

The PTA's position

The PTA refers to the latest answer given above, concerning a similar comment submitted by Ósiminn. The PTA intends to complete the aforesaid decision regarding further elaboration of the ERT test, following national consultation and consultation with the EFTA Surveillance Authority, in 2022, so that the actual testing can begin as soon as 2023. It is therefore not the case that Ósiminn has to wait seasons or years for the more detailed elaboration. Furthermore, the PTA does not see why the Competition Authority would have to annul its Decision no. 6/2015 (conciliation between Ósiminn Group and the Competition Authority) due to this procedure adopted by the PTA, as Ósiminn has submitted no arguments to support this view.

Ósiminn pointed out that, in connection with economic replicability, that indisputably it was not necessary for telecommunications companies' access to Míla's copper or fibre-optic local loops in areas where GR or Tengir were operating. Ósiminn had been pointing out this evident fact to the PTA for years. It was not even necessary to have access to copper local loops. Consequently, there were no grounds for considering economic replicability in the relevant areas. For example, Ósiminn had made an agreement with GR regarding bitstream access, using a large number of other systems not included in Ósiminn's set. GR was selling access to local loops wholesale and also retail. For example, local loops were not resources for internet service, but bitstream connections were. In GR's system Ósiminn would under the current circumstances not use Míla's bitstream service, and furthermore Ósiminn had requested a list of tariffs for bitstream service from Tengir but not received one. Ósiminn nevertheless assumed that an agreement would be

reached with Tengir. If Síminn was not using Míla's infrastructure or products such a requirement could not apply.

The PTA's position

The PTA does not agree that it is not necessary for telecommunications companies to have access to Míla's copper or fibre-optic local loops, irrespective of whether this is on a national level or only in GR's and/or Tengir's areas of operation. It is of great importance for the development of competition that access is available for service providers in more than one underlying network. Míla has significant market power in the relevant wholesale markets and therefore an obligation for access is necessary, along with the other obligations which the PTA intends to impose on Míla. Therefore, the PTA also disagreed with Síminn's assertion that thereby grounds for ERT testing in GR's and Tengir's areas did not exist.

In the decision which the PTA makes subsequent to this market analysis, following national consultation and consultation with the EFTA Surveillance Authority and other telecommunications regulatory authorities in the EEA Area, it will be elaborated whether the aforesaid ERT obligation will apply where Síminn leases local loops on Míla's fibre-optic network or bitstream access from Míla on Míla's fibre-optic network or other parties to which Míla leases access in market 3a, for the company's bitstream services.

The PTA also does not agree with Síminn that local loops are not resources in internet service, only bitstream connections. Leasing of local loops is lower in the value chain compared to bitstream service, and without local loops there can be no bitstream in a fixed network. Today, leasing of local loops is mostly for internal use within the relevant telecommunications infrastructure company, such as Míla and GR. Still, Tengir does lease local loops to Míla (black fibre-optic cable) to a considerable extent in its area of operations, in addition to which Tengir also offers bitstream access.

The Competition Authority referred to paragraph 76 of the PTA's additional consultation document, wherein it was stated that part of the PTA's arguments in the preliminary draft for plans for cost-analyzed prices for fibre-optics had been the competitors' statements that Míla underpriced fibre-optic connections in competitive areas. The PTA believed that such behaviour could in the long run create a better position for Míla to collect excessive prices, if the competition could not compete with Míla's current prices. The PTA had in fact not obtained conclusive evidence that Míla's pricing of fibre-optic cable was below cost. Cases regarding harmful underpricing should rather be handled by the Competition Authority than the PTA. The PTA considered that this did not, at this time, warrant the imposition of an obligation for cost-analysed prices for Míla's fibre-optics in the relevant markets. Regarding Síminn's comment on how underpricing could not be the basis for imposing an obligation for monitoring lists of tariffs, cf. Article 32 of the Electronic Communications Act, the PTA had specified in the preliminary draft that the alleged underpricing had not been the main argument for imposing such an obligation. As described in the discussion on competition problems in the preliminary draft, it was the market structure, where SMPs were vertically integrated, which is considered to lead to too high wholesale prices, if nothing were to be done.

The Competition Authority stated that it could be pointed out that if wholesale prices in the relevant market were possibly below cost, the PTA would have to take this into account in its market analysis and the requirements imposed on the relevant market, as on the other hand it seemed that there was a market failure due to the aforesaid line charge on the retail market, as

the pricing of line charges might be excessive. The Competition Authority stated in this context that even though the alleged underpricing was only one of several reasons why the PTA considered there to be a need for the imposition of a price control obligation, the PTA did not have to demonstrate that harmful underpricing was taking place in order to impose monitoring requirements with regard to cost-analyzed wholesale prices based on Article 32 of the Electronic Communications Act no. 81/2003, but rather that according to the authority provided by the Act the PTA's market analysis would have to *"indicate that the lack of effective competition results in the relevant companies demanding excessive prices or an abnormally small difference between wholesale and retail prices [...]"*. As stated in the market analysis, the PTA considered Síminn Group to be a single economic unit. The Group's significant market power had been discussed in detail in the preliminary draft, as had its vertical integration, as well as the companies' abilities and incentives on those grounds.

It was correct that the Competition Authority could initiate an investigation of Míla's alleged harmful underpricing in light of the prohibitions according to the Competition Act no. 44/2005, although the Authority could not see what effect this would have on the PTA's market analysis and the potential monitoring requirement with regard to Míla's cost-analyzed wholesale list of tariffs for fibre-optic cable. Even though there was a certain connection between market analysis according to the Electronic Communications Act and European competition law, the content of paragraph 1 of Article 32 of the Electronic Communications Act was not the same as that of Article 11 of the Competition Act regarding abuse of dominant status on the market. In other words, the lack of competition, along with the ability, incentives and previous conduct of a company with significant market power, might give cause to impose a monitoring requirement, based on Article 32 of the Electronic Communications Act, regarding Míla's cost-analyzed wholesale prices for fibre-optic cable, although the same conditions or conduct might at the same time be legitimate in the sense of Article 11 of the Competition Act.

With reference to the aforesaid discussion, the Competition Authority hoped that the PTA would take these comments into account in its final decision regarding whether a monitoring requirement would be imposed on Míla regarding cost-analyzed wholesale prices of the company's fibre-optics in markets 3a and 3b.

The PTA's position

In paragraph 1 of Article 32 of the Electronic Communications Act it is stated that when market analysis indicates that a lack of effective competition will result in telecommunications companies with significant market power demanding excessive prices or an abnormally small difference between wholesale and retail prices, the PTA can impose requirements for a cost-based list of tariffs. This provision therefore does not address underpricing. In its preliminary draft the PTA considered short-term or average duration underpricing to be able to later result in excessive charges for Míla, if telecommunications infrastructure companies that were in competition with Míla would suffer significant loss from such alleged conduct. The company's competitors in the field of telecommunications infrastructure have maintained that Míla's buildup of fibre-optics and services in markets 3a and 3b is being subsidized by Síminn's high line charges in the retail market. Various service providers, such as Vodafone and Nova, on the other hand have rather tended to complain about the excessive wholesale prices charged by Míla and other telecommunications infrastructure companies. As stated in the additional consultation document, the PTA has no evidence that Míla has engaged in underpricing of its fibre-optic local loops or bitstream service provided by the company's fibre-optics.

The PTA agrees with the Competition Authority that the content of the aforesaid Article 32 of the Electronic Communications Act and of Article 11 of the Competition Act is not the same. However, the PTA does reiterate that Article 32 of the Telecommunications Act does not authorize the PTA to intervene and impose a cost-analysis requirement in the event of underpricing of wholesale services. As the PTA described in its preliminary draft, such underpricing could result in excessive prices for such services at a later stage. The PTA could then intervene and impose the aforesaid cost-analysis requirement. Even though the content of Article 11 of the Competition Act is not the same, this does not alter the fact that the Competition Authority is authorized to address damaging underpricing if the conditions of this provision are met. The provision of Article 32 of the Electronic Communications Act, as it is worded, is primarily intended to strengthen the competitive ability of service providers that are not connected with Síminn Group, in competition with Síminn, on Míla's networks. The provision does not seem to provide Míla's competitors in telecommunications infrastructure competition with protection against Míla's potential underpricing.

The PTA has in its previous answers given arguments for why the PTA decided to abandon the imposition of a requirement for cost-based prices for Míla's fibre-optics. See the relevant sections. It may be mentioned that the PTA considers that the aforesaid ERT requirement should have a sufficiently restrictive effect on Síminn Group with regard to pricing, based on the analyzed competition problems in the relevant wholesale markets and the related retail market. If there are negative developments in competition during the lifetime of the analysis, or if Síminn Group fails the ERT test and does not subsequently redress its pricing, a possible course of action is for the PTA to perform a new market analysis where it would be considered to impose the aforesaid cost-analysis requirement regarding Míla's fibre-optics.

GR pointed out that in the additional consultation document Síminn was quoted as stating that the company had alerted the PTA's attention to the fact that the condition for imposing an obligation on the basis of Article 32 of the Electronic Communications Act regarding monitoring of lists of tariffs was dependent on the analysis "*revealing*" that due to passive competition, the SMP company was demanding exorbitant fees or that there was an abnormally small difference between the retail price and the wholesale price.

In GR's assessment the text of the provision was not being interpreted correctly. "*Revealing*" meant that a certain fact had been demonstrated and thereby it had been proven. This however was not the meaning of the wording of the paragraph in the Act. Therein it is stated verbatim that:

*"When market analysis **indicates** that lack of effective competition leads to a telecommunications companies with SMP demanding excessively high fees or an abnormally small difference in wholesale and retail prices, the PTA may impose obligations on telecommunications companies regarding cost-based lists of tariffs and obligations regarding cost accounting for certain types of interconnections or access."* (Font changed by GR)

Thus, the text of the legal provision only referred to that the market analysis *indicated* this, not that it was a condition that the analysis revealed it without question. Such an explanation was also not consistent with the definition in the Electronic Communications Act of a „*company with significant market power*“. Therein it was only referred to that a company on the market could have the economic strength on a certain market *to be able* to hinder effective competition, not that this necessarily would hinder it in actuality. It was the structure of the market, the situation and the potential of the company that mattered here. This legal interpretation was also

consistent with the generally accepted views in competition law that special obligations applied to dominant companies, or companies with sufficient market power to be able to conduct business to a significant extent without taking competitors, customers and consumers into account.

Therefore, in GR's assessment it could not be seen that any of the arguments to which Míla, AM and Síminn had referred to mattered in light of the wording of those provisions of the Electronic Communications Act that governed the assessment of whether requirements should be imposed on a telecommunications company that was considered to have significant market power on the relevant telecommunications market. In fact, it seemed inevitable to conclude that Síminn's legal interpretation was contrary to the wording of the provision of Article 32 of the Electronic Communications Act. Síminn's annotations were based on conditions and reservations that could not be found to exist in the direct wording of the provision.

Also, in GR's assessment there was nothing to be found in the way of discussion on the PTA's part regarding whether the announced changes, i.e., the imposition of an ERT requirement, came under the authorisation and remedies specified in paragraph 1 of Article 32 of the Electronic Communications Act and whether those methods would achieve the objectives striven for. In this context it also had to be questioned if there existed any legal authority for departing from the direct legal instruction of paragraph 1 of Article 32 of the Electronic Communications Act, wherein it is stated verbatim that *"the telecommunications company's investments and reasonable profitability, with due reference to the risk involved with the investment, shall be taken into account."* Therefore GR considered that the PTA had not demonstrated that an ERT test served the same objective or that it had been verified that such testing would at least result in the attainment of the objectives of the legal provision or an acceptable conclusion for the market participants. In GR's assessment the PTA, in its capacity as a regulatory authority, would have to demonstrate that legal requirements existed that justified applying the methodology in the recommendations from foreign supervisory bodies, which was not evident by default. In GR's assessment this had not been done in a satisfactory manner.

The PTA's position

The PTA agrees with GR that for it to be possible to impose a requirement for cost-analyzed prices it is sufficient, in accordance with paragraph 1 of Act 32 of the Electronic Communications Act, that a market analysis "indicates" that the lack of effective competition will result in telecommunications companies with significant market power demanding excessive fees or in an abnormally small difference between wholesale and retail prices. Therefore, according to the provision, it is not necessary to prove that this has taken place. The PTA reiterates that the provision does not apply to the alleged underpricing.

The PTA furthermore rejects that no discussion was included in the additional consultation document regarding whether the announced changes, the application of an ERT test instead of cost-based lists of tariffs for Míla's fibre-optics, came under the scope of application of the authorisation and remedies stipulated in the Electronic Communications Act. In paragraph 93 of the aforesaid additional consultation document, it is stated:

"The imposition of an obligation for ERT tests was part of monitoring that the obligation for non-discrimination was complied with. The aim was to ensure that competitors in the market had the same opportunities as the network operator to offer internet service packages at retail level at a price that was competitive with the price of the network operator's retail arm. The new EU Directive on Telecommunications 2018/1972 EECC

mentioned ERT in subparagraph 3 of paragraph 1. Article 74 which discussed monitoring of lists of tariffs. However, it stated that an ERT test would be applied in accordance with Article 70, but that Article concerned the requirement of equal treatment. ERT test appear to be generally considered a part of the requirement of equal treatment. The ERT test, however, entails a kind of price control and the PTA therefore considered it proper to refer to both Article 30 of the Electronic Communications Act (on equal treatment) and Article 32 (on the monitoring of lists of tariffs), regarding the legal basis of the obligation for an ERT test.

As stated in the PTA's answers earlier in this section, the PTA considers that in light of the analyzed competition problems and various developments that have occurred since the preliminary draft was submitted for consultation, including Síminn's agreement regarding bitstream access to GR's fibre-optics network, in addition to the views on proportionality, the PTA considered it proper not to apply the strictest requirement for monitoring the list of tariffs for Míla's fibre-optics, i.e. a cost-based list of tariffs, and instead stipulate that an ERT requirement should apply to Síminn Group. The PTA considers that the restrictive effect which the ERT requirement should have on Síminn Group is adequate for the time being, and thus consistent with the objectives of the telecommunications regulatory system. In addition, the PTA considers that the aforesaid ERT requirement is more consistent with the aforesaid EU Commission recommendations of 2013 than the aforesaid cost analysis requirement, based on the competitive conditions that exist in this country.

Nova referred to paragraph 78 in the additional consultation document, where it was stated that among the factors on which the PTA based its revised assessment was that changes had occurred with regard to certain factors since the preliminary draft had been submitted for consultation, which had had an effect on the telecommunications market. Among these was the agreement which Síminn had entered into regarding access to GR's network, and this should strengthen GR's position on the relevant wholesale markets to some extent. Furthermore, access to Síminn's television content had become easier and wholesale prices for broadcasts of English Football League matches were lower than before, and therefore Síminn's control of Síminn's television content was not as influential a factor when it came to Síminn Group's market power as it had been. However, no agreements had been entered into between Síminn and Vodafone or other parties on wholesale or resale of Síminn's Premium television content package. Nevertheless, that visual content would be accessible on GR's network in 2021, but, under the current circumstances, only for those consumers that did retail business with Síminn.

Nova stated with regard to PTA's discussion of Síminn's agreement with GR that it would increase Síminn's access to retail business on the bitstream market quite significantly. In light of the lengths to which Síminn went in its market operations since the year [...], this change would make it possible for Síminn to continue to increase its share in nearly all telecommunications submarkets.

In Nova's assessment the situation had actually not changed to such extent as to make any great difference. Síminn had entered into nearly no agreements regarding television service, and it was fairly clear that this would not change even if Síminn could use GR's fibre-optics network. The English Football League broadcasts, for which Síminn had already been fined by the Competition Authority, had accounted for considerably fewer viewers during the current global pandemic situation, and it was clear that this would change rapidly when that situation was over. In Nova's assessment, the aforesaid agreement would possibly benefit GR in its competition with Míla, and in addition it would be of great use when it came to the retail

business of Síminn, which was already dominant in nearly all fields concerning telecommunications.

The PTA's position

Nova is correct that Síminn's access to GR's bitstream access will provide Síminn with access to customers who have underlying service on GR's fibre-optics network. As the PTA has stated in Appendix B, and as stated in the updated preliminary draft (Appendix A), it is likely that Síminn's market share will exceed 50% during the lifetime of the analysis for this reason. It is nevertheless clear in the PTA's assessment that Síminn will primarily be trading in bitstream service with its subsidiary, Míla, and in the PTA's assessment the latter company's roll-out of fibre-optics network will increase steadily for the duration of the lifetime of the analysis.

As regards the English Football League broadcasts, Nova is correct that they have had less impact since the beginning of 2020 due to the effects of Covid-19.

In February of 2021 Síminn announced a change in the company's television app, which entails that now it will be possible to get Síminn's Premium television package and the company's other television content through Apple TV. However, in the current circumstances it is necessary to connect this app to a decoder supplied by Síminn, although it is Síminn's plan that later this year it will be possible to use the app without connecting to Síminn's decoder. This will therefore mitigate the harmful effects which Síminn's television content has had for competition in the telecommunications market in this country ever since October of 2015.

GR considered that the decision not to impose restrictions regarding Míla's fibre-optics would not result in an improvement of the competition status on the wholesale market. On the contrary, such decisions would lead to Míla having even more dominance and monopoly in these markets, as it seemed inevitable that during the time of validity of the intended market analysis Míla would manage to complete the installation of fibre-optics for its data transmission network. Then the situation would be that no requirements for cost-analyzed prices would apply to the fibre-optics network of the largest and strongest company in markets m3a and m3b in order to equalize the positions of market participants. Such dominant status would decrease competition. The announced decision not to impose and possibly lower requirements, which was made without taking into account the aforesaid structure of the market, was highly questionable in GR's assessment.

In GR's assessment there was every reason for the PTA to investigate this factor even further, and to abandon the plan not to impose a requirement regarding cost-analyzed prices of Míla's fibre-optics.

In this context the GR also pointed out that according to Paragraph 2 of Article 17 of the Electronic Communications Act, market analysis shall be the basis for decisions on whether the PTA shall impose, maintain, amend or withdraw restrictions on companies with significant market power in accordance with Article 18 of said Act. An undertaking was to be deemed to have SMP if it, either individually or jointly with others, holds a position of economic strength on a certain market which enables it to prevent effective competition and to operate to a substantial extent without concern for competitors, customers and consumers.

It was also important to refer to the provision of paragraph 2 of Article 18 of the Electronic Communications Act, which stated that when a company individually or *jointly with others* had significant market power on a certain market it could also be considered to have significant

market power *on a related market* if the connection between the markets was such that the company could apply its market power in one market for the purpose of increasing its market power in the other. The aforesaid substantive provisions of paragraph 2 of Article 18 gave the PTA ample cause to assign far greater importance to the vertical integration of Síminn and Míla. The necessity of imposing requirements on Míla would have to be assessed with due consideration of the fringe effects that were specifically discussed in the aforesaid provision. In GR's assessment this discussion was lacking from the PTA. In addition, the substantive provision gave in GR's assessment cause for further analysis of whether vertical integration should in fact not lead to further requirements in light of the evident market structure. In this regard, the statements in AM's report to the effect that the PTA had cited the alleged accusations from GR regarding Míla's underpricing as the basis for its initial assessment regarding the imposition of requirements on Míla, are entirely inconsistent with the objective criteria found in Sections V and VII of the Electronic Communications Act.

The PTA's position

The PTA plans to abandon the intended imposition of a requirement for cost-analyzed lists of tariffs for Míla's fibre-optics, as stated in the PTA's preliminary draft. The PTA refers to the discussion earlier in this section, and in the updated analysis (Appendix A), regarding the arguments in support of this. Instead, the PTA intends to impose on Síminn Group the requirement that it shall pass ERT tests. GR is therefore not correct in stating that no price control obligation will apply to Míla's fibre-optics network, as the aforesaid ERT requirement is as already stated a combination of a non-discrimination obligations and price control, and the PTA applies it in order to closely observe pricing within the group and can demand changes to Míla's wholesale prices and/or Síminn's retail prices, should the group fail the test.

In light of the fact that currently no requirements apply to the group regarding the price of fibre-optic connections, this constitutes significantly increased requirements. Based on the analyzed competition problems in the relevant wholesale markets and the related retail market, the PTA considers that the aforesaid ERT requirement can be sufficient to increase competition on the aforesaid telecommunications markets. If developments indicates that this will not be the case, or if the group fails the aforesaid ERT test and does not comply with the PTA's instructions to make improvements, a possible course of action will be the imposition of a requirement on Míla regarding a cost-analyzed list of tariffs for fibre-optics. In addition to the aforesaid reasons for the change announced by the PTA, the PTA does not consider it to be consistent with the principle of proportionality to impose a requirement for cost-analyzed prices for Míla's fibre-optics, unless the competitive situation develops for the worse. The PTA reiterates that companies such as GR and Tengir have achieved extensive roll-out of fibre-optics networks and satisfactory results from operations despite the lack of price control obligations regarding Míla's fibre-optic network up until the present moment.

The PTA does not agree with GR that the addition of an ERT requirement for Síminn Group will result in Míla having an even stronger dominant position and monopoly on the relevant wholesale markets. The PTA points out that Míla's market share has decreased considerably on the aforesaid markets in recent years, from 83% in 2014 to 57% at the end of 2020 on market 3a, and from 65% to 57% on market 3b during the same period. Although it is clear that Míla is still in a strong position on these markets, it does in no sense have a monopoly as GR seems to suggest. At the end of 2020 GR's market share was 36% on market 3a and 40% on market 3b, and the company's share has been slowly and surely increasing for many years. Furthermore, the PTA does not agree with GR's statement that Míla will complete its roll-out of fibre-optics in the next three years, as it is clear that Míla still has not installed fibre-optics for the costliest

areas, both within and without the capital area. However, it is the PTA's assessment that the extent of Míla's fibre-optic networks on one hand and that of the combined roll-out of the fibre-optics of the company's competitors on the other will get quite similar towards the end of the lifetime of the analysis.

The PTA also denies that it did not take the structure of the market into account when it decided not to impose a cost analysis requirement regarding Míla's fibre-optics and instead stipulate that an ERT requirement should apply to Síminn Group. The analysis includes a detailed discussion of the structure of the market, and also of the analyzed competition problem, both potential and actual. The PTA therefore considers that the issue has been adequately studied, as this is a very extensive analysis.

GR considered that in light of paragraph 2 of Article 18 of the Electronic Communications Act the PTA needed to place far greater emphasis on the structure of the market, especially the vertical integration of Síminn Group. The PTA disagrees that there was insufficient discussion or investigation of this factor. For instance, it may be mentioned that in Sections 10.2 and 11.2 in the updated preliminary draft (Appendix A) there is a detailed description of the many competition problems, both potential and actual, connected with the vertical integration of the group. It is also worth referring to Sections 8.4.9 and 9.4.9 in the same document, which addresses the vertical integration of the group as part of the discussion of the analysis of significant market power in the relevant wholesale markets.

GR also pointed out that the aforesaid provision of paragraph 2 of Article 18 of the Electronic Communications Act called for further analysis of whether the vertical integration of Síminn Group should not in actuality result in more requirements being imposed on the group. The PTA reiterates that the imposition of the aforesaid ERT requirement entails additional requirements for the group and restrictions with regard to pricing within it, which have not been in place up until now.

GR points out that in paragraph 1 of Article 27 of the Electronic Communications Act it is stated that when a telecommunications company is designated with significant market power, the PTA may impose on it obligations concerning transparency, equal treatment, accounting separation, open access to specific network facilities, monitoring of lists of tariffs and cost accounting, as necessary for the purpose of promoting effective competition. The legal requirements cited in justification of imposing requirements on telecommunications companies were therefore based on completely different grounds than those which AM implied had caused PTA's actions.

In addition, cases and the investigation of cases concerning harmful underpricing in the competitive market came under the scope of the Competition Authority, not the PTA's area of competence. The main emphasis of the Electronic Communications Act was mainly on assessing the market strength of a company, which would be revealed through the examination and analysis of markets, cf. Article 16 of the Electronic Communications Act, and whether that company's strength could hinder effective competition. In light of the aforesaid, AM's statements and arguments were not consistent with Icelandic telecommunications legislation. The restrictions were imposed because the situation could arise that a company with significant market power could hinder competition. This was consistent with the PTA's role to promote, *ex ante*, an efficient telecommunications market for instance by ensuring a market structure and conditions conducive to effective competition.

The PTA's position

GR correctly states that paragraph 1 of Article 27 of the Electronic Communications Act *authorizes* the PTA to impose the aforesaid requirements on a company with significant market power.

It is also the PTA's understanding that cases involving harmful underpricing generally come under the scope of the Competition Authority, as paragraph 1 of Article 32 of the Electronic Communications Act does not authorize the PTA to impose cost-analysis requirements on companies with significant market power in the event of underpricing, but primarily in cases of overpricing.

GR did not agree with Síminn Group's arguments that a considerable amount of time would pass before the goals of fibre-optics roll-out were reached. Míla stated that the company had yet to install fibre-optic cables in 2/3 of access addresses in the country. GR disputed this figure and referred to the number of customers and the information published in Míla's annual accounts. The PTA considered that in light of the aforesaid it was proper to avoid imposing requirements that might compromise the fibre-optic roll-out goals on the national level.

GR also pointed out that the recent agreement between Síminn and GR in fact entailed that [...]

GR therefore considered the PTA's intention not to impose requirements regarding the price of Míla's fibre-optics would not prevent the serious competition problems that already existed in these markets but would rather aggravate the problems that would arise due to the fact that Síminn and Míla were vertically integrated in the relevant intersecting markets and thereby operated as a single economic unit. In this context it had to be considered that according to the current market analysis, cf. the PTA's Decision no. 21/2014, no requirements were imposed on Míla's fibre-optics. At the time, the decision to exempt Míla's fibre-optics from pricing requirements had been justified with the argument that Míla's roll-out of its fibre-optic network was still in its early stages. It had been stated in Míla annual accounts for 2015 that Míla could offer about 10,000 households its GPON connections, and it was also worth mentioning that in those annual accounts the company had also stated that it intended to complete the connection of fibre-optics to 30,000 households in the capital area before the end of 2016. However, at present it was clear that Míla's fibre-optic network would during the lifetime of the analysis most likely become the most extensive fibre-optic network in the country. It was therefore highly inappropriate that the PTA intended to abandon its plan to impose pricing requirements on a fibre-optic network of this caliber, which would in the short and the long run be the backbone of all of Síminn Group's sales and market activities, both in the wholesale and retail telecommunications markets.

It also had to be considered that in most places in Europe the proliferation of fibre-optics had advanced much less than in Iceland, and this could be regarded as the principal explanation for the less stringent conditions that existed there. In GR's assessment no arguments had been given to support that these conditions should also exist in this country.

The PTA's position

It is the estimate of the PTA that the fibre-optics distribution achieved by parties other than Míla will have reached about 77% at the end of the lifetime of this analysis. Míla incorrectly states that the company has yet to install fibre-optics in about 2/3 of access addresses in the country. At the end of 2020 the roll-out of Míla's fibre-optic network had reached about [...] % of households and companies, and it has spread further since then. It is also the PTA's

assessment that Míla's roll-out of fibre-optics will remain strong for the duration of the lifetime of the analysis, as it has been since the year 2016, and that at the end of the lifetime of the analysis the extent of the distribution of Míla's fibre-optics on one hand and that of the company's competitors on the other will have become quite similar. It is therefore clear that there is still a lot of ground to cover before nationwide fibre-optic coverage is achieved, and that it will not be completed during the lifetime of this analysis, except with considerable assistance from the state.

The PTA has, in Appendix B and the updated preliminary draft (Appendix A), accounted for its assessment of the agreement between Síminn and GR regarding Síminn's bitstream access to GR's fibre-optic network beginning in July 2020. The plan was that Síminn would begin providing service on GR's network in the first half of 2021, but Síminn commenced that service on 25 August 2021. In the PTA's assessment this agreement, all things being equal, will result in somewhat better utilization of GR's network to the detriment of the utilization of Míla's network, yet not to such extent that Míla's market share will drop to below 50% at the end of the lifetime of the analysis in the relevant wholesale markets. Various other developments, which may very well occur, may prevent this from happening. On the other hand, it is clear in the PTA's assessment that this agreement, all things being equal, will probably have the effect that Síminn's market share in the related retail market will exceed 50% at the end of the lifetime of the analysis.

The PTA submitted arguments earlier in this document in support of the authority's decision not to impose a cost-analysis requirement regarding Míla's fibre-optics network, and instead require Síminn Group to pass ERT tests. A discussion of this can also be found in the updated preliminary draft (Appendix A). See the relevant sections.

GR correctly states that one of the reasons that the PTA did not propose a cost analysis requirement regarding Míla's fibre-optic network in the last analysis in the year 2014 was that at the time the roll-out of Míla's fibre-optic network was still in the very early stages. Currently it has progressed much further, although it is clear that Míla still has considerable ground to cover before this roll-out is completed. The PTA finds cause to question the accuracy of this statement from GR, that it is likely that Míla will have the most extensive fibre-optic network in the country at the end of the lifetime of the analysis discussed here. In order to avoid detracting from incentives for investment in further roll-out of fibre-optics, among other reasons, the PTA considered it proper to abandon its plan to impose a requirement regarding a cost-analyzed list of tariffs for Míla's fibre-optic network and impose instead the aforesaid ERT requirement.

GR is correct to state that the roll-out of fibre-optics has progressed far in this country compared with many states in Europe. However, this has been achieved mostly by other parties than Míla in this county, even though Míla has been stepping up its efforts in this regard to a considerable extent since the year 2016. It is nevertheless the PTA's assessment that at the end of the lifetime of the analysis the combined roll-out achieved by Míla's competitors will still remain somewhat more extensive than the fibre-optic roll-out achieved by Míla.

GR was of the opinion that the PTA's plan not to impose a requirement on Míla regarding cost-analyzed prices for access to fibre-optic local loops in market M3a and bitstream on fibre-optic local loops in market M3b was ill-advised and would have very negative effects on developments in the aforesaid markets and related markets at the retail level. It could not be

seen that conditions and factors that would determine the future development of these markets had been taken into account.

The two most powerful companies in the highly important markets, i.e., the relevant wholesale markets and the retail market, were vertically integrated. In the PTA's preliminary draft, it was assumed that Míla's market share in market 3a had dropped from 83% to 63%. The PTA considered that although the market share had dropped significantly, it was still sufficiently high to give very strong indications of SMP. Other factors supported the conclusion regarding Míla's SMP, such as access barriers and lack of competition. Míla still controlled the only access network that covers the whole country and has made major investments in fibre-optic networks during recent years. Furthermore, the position of Síminn Group is still very strong and Síminn has once more started to increase its share in downstream retail markets.

The PTA had assumed that Míla's market share in market 3b had dropped from 65% to 59%. The PTA had considered that although the market share had dropped significantly, it was still sufficiently high to give very strong indications of SMP. Other factors supported the conclusion regarding Míla's SMP, such as access barriers and lack of competition. Míla was the only company that operated a nation-wide bitstream service. Furthermore, the position of Síminn Group was still very strong and Síminn had once more started to increase its share in downstream retail markets.

It was therefore beyond all reasonable doubt that the companies within Síminn Group were in a completely dominant position when it came to competition, both with regard to market share and infrastructure, in addition to which it worked as a single unit vertically in nearly all the markets that were important for progress in active telecommunications markets.

The intended concession would in GR's assessment have the effect that Síminn Group's options to vertically shift costs between the group's companies that worked as a single economic unit would be easier and thereby it could fortify its position in markets through actions that would be hard to react to in a timely and effective fashion. GR pointed out that Síminn Group had applied its market power in adjacent markets. For example, the PTA's Decision no. 10/2018 indicated that this had taken place. Also, Síminn had been using package offers and bundles in this context and thereby directed business towards Míla's connected company using offers.

The PTA's position

The PTA refers to its previous answers regarding the arguments for the PTA's intent not to impose a cost analysis requirement regarding Míla's fibre-optics, as the PTA had planned in its preliminary draft, and instead impose an ERT requirement on Síminn Group. Nevertheless, this would entail additional requirements for the group compared with the current situation. As aforesaid, it is the PTA's assessment that the aforesaid ERT requirement is likely to increase competition in the relevant wholesale markets and the related retail market, as it entails restrictions to pricing within the group, yet grants it some leeway with regard to pricing, which should not be a hindrance to the further roll-out of Míla's fibre-optics.

The intended concession would in GR's assessment have the effect that Síminn Group's options would be able to shift costs between the group's companies in an easier fashion and thereby it could fortify its position in the aforesaid wholesale and retail markets through actions that would be hard to react to in a timely and effective fashion.

The PTA reiterates that the authority is increasing the requirements that shall apply to Síminn Group, compared with what applies currently. This should make it harder for the group to apply cross subsidies or other forms of harmful under or overpricing. By applying the aforesaid ERT requirement that requirement will also apply with regard to Síminn's retail pricing, which would not be the case if a cost-analysis requirement were imposed regarding Míla's fibre-optics. When the PTA has elaborated the ERT requirement by special decision, nothing should stand in the way of the PTA beginning to apply regular ERT testing. In many places in Europe such tests are applied with regard to popular bundles supplied by the dominant company at the retail level, i.e., to address so-called "flagship products".

GR pointed out that if the PTA abandoned its plan to impose the intended requirements regarding lists of tariffs, or if it did not at least have at its disposal other remedies that could be applied in an equally effective and timely manner to respond to Míla's and Síminn's actions, this could ultimately lead to less competition and thereby go against the primary objectives of the new legal framework for the Electronic Communications Act, which were to increase competition on telecommunication wholesale markets. The equalization of competitive condition on the wholesale market was a vital prerequisite for increased competition in the related retail market.

The PTA's position

The PTA agrees with GR that it is a pressing task to strengthen competition in telecommunications markets in this country and considers the new ERT requirement to be important in that context. It is also important to elaborate and implement the test in such manner that the authority can respond to potentially harmful pricing by Síminn Group in a timely manner, which is the PTA's intention with the aforesaid ERT requirement.

Nova stated that it was difficult to determine whether the aforesaid alterations, i.e., to apply ERT testing instead of price requirements will ensure better developments with regard to competition. In order for such a determination to be made in a clear manner, it would require further elaboration of the arrangement of this ERT test, as well as of the arrangement of the measures taken, i.e., monitoring, penalties and similar factors once the procedure has been established.

In Nova's assessment there was a risk that Míla's wholesale prices would increase considerably and competitors on the retail level would therefore have even less leeway with regard to their margins, which was a situation that Síminn Group had endeavored to maintain, and the PTA was endeavoring to improve. This would be the point of contention.

Nova considered that the PTA assumed that the cost-analyzed prices of copper, which were much lower, would lead to a decrease in the price of fibre-optic cable, and thereby it would remain competitive. The PTA referred in this context to the analysis of substitutability, which indicated that customers wanted an internet connection that worked and did not care whether it was called copper or fibre-optics, only if they could get it at a good price. In Nova's estimation, it is uncertain whether this would happen, i.e., that local loop charges would generally decrease. Nova considered there was little will on behalf of Síminn Group to reduce access charges, and that this was evident from the fact that the access charge offered by Síminn on the retail level was mostly the same, regardless of speed. In Nova's estimation this was yet another confirmation of the substitutability between internet connections whether via copper connections or fibre-optics connections.

Nova was not opposed to taking other measures than cost-analysis in order to create fair rules in the telecommunications market to strengthen competition, as in Nova's opinion little success had been achieved in strengthening competition in Iceland despite the requirements that applied to Míla today. In Nova's estimate there were highly strong indications that Míla was in a position of significant market power, even though that company's market share had decreased slightly. In other respects, Nova was not at all in favor of reducing requirements that applied to Síminn Group, which had repeatedly demonstrated through its actions on the market that various trickery was being employed in order to achieve dominant status in nearly all areas of the telecommunications market.

As aforesaid, it was unclear what the ultimate conclusion would be, i.e., in what manner the ERT test would be elaborated, and in Nova's estimate it was necessary with regard to the calculation of Síminn's retail prices to take in to account all subsidies as seen on the market today, which manifested among other things as opening offers, free months, extra data volume and other things. It was necessary to include such business practices when estimating retail prices. It was also very important to be able to estimate the part played by internet connections in the packages offered, as Síminn's household package had many times been mentioned in that context.

Nova would participate in any co-operative efforts necessary to swiftly bring about the aforesaid changes to the rules of the game.

The PTA's position

Nova states that it is not opposed to taking other measures than the cost-analysis requirement in order to create fair rules in the telecommunications market to strengthen competition, as in Nova's opinion little success had been achieved in strengthening competition in this country despite the requirements that applied to Míla today. However, Nova was not in favor of decreasing requirements that applied to Síminn in any other way. Nova would participate in any co-operative efforts necessary to swiftly bring about the aforesaid changes to the rules of the game.

The PTA considers that the aforesaid comment from Nova does not entail that the company is opposed to the PTA imposing the aforesaid ERT requirement on Síminn Group instead of requiring cost-analyzed prices for Míla's fibre-optics.

The PTA points out that subsequent to the market analysis here under discussion, the PTA will begin work on the further elaboration of the ERT test, where interested parties on the national level will be given an opportunity to comment on the drafted decision, as will the EFTA Surveillance Authority and other telecommunications monitoring bodies in the EEA Area. Therein it will be precisely stated how the measures will be implemented, monitoring and possible penalties.

Nova is concerned that there will be a risk that Míla's wholesale prices would increase considerably, and thereby competitors on the retail level would have even less leeway with regard to their margins. The PTA points out that ERT tests of this kind are generally elaborated in the manner that the relevant telecommunications monitoring body can intervene regarding wholesale or retail prices, or both, in order to ensure that the situation described by Nova does not arise.

Nova considers that the PTA is assuming that cost-analyzed prices for copper, which was far lower with Míla than the prices for fibre-optic connections, would cause the price of fibre-optics to decrease, and thereby it would remain competitive. In Nova's estimation, it is uncertain whether this would happen, i.e., that the local loop charge would generally decrease. Nova considered there was little will on behalf of Síminn Group to reduce access charges, and that this was evident from the fact that the access charge (line charge) offered by Síminn on the retail level was mostly the same, regardless of speed.

It is interesting that service providers such as Nova and Vodafone complain that Míla's wholesale prices are too high, while at the same time Míla's competitors in telecommunications infrastructure, such as GR and Tengir, complain that they are too low. The PTA does not assume that the cost-analyzed copper prices will lead to a reduction in the price of Míla's fibre-optics. The PTA does however consider that a "copper anchor" is in place, which leads to a certain level of restraint regarding the pricing of Míla's fibre-optics. The PTA furthermore points out that Míla's cost-analyzed prices have not changed in about 2 years, but Míla recently submitted a new cost-analysis which the company. It is not unlikely that this analysis will lead to an increase in copper prices and thereby the wholesale prices for copper and fibre-optic connections will become more similar.

Nova also considered it necessary in the further elaboration of the ERT test that all of Síminn's subsidies, as applied to the retail market today (e.g., opening offers, free months, data volume etc.) were taken into account in the assessment of retail prices, and also bundles such as the household package.

The PTA reiterates that factors such as those mentioned herein by Nova will be examined by the PTA subsequent to this market analysis. A draft of that decision will then be published for national consultation, so that interested parties will have an opportunity to comment on the elaboration before the final decision will be revealed.

Nova referred to paragraph 79 in the additional consultation document, wherein it was stated that the PTA did not intend to impose a requirement on Míla regarding cost-analyzed prices for access to fibre-optic local loops in market 3a and bitstream on local loops in market 3b.

Nova stated that in light of the extensive growth of Síminn, Nova was concerned about the relaxation of requirements, as the company believed that there was substitutability between the underlying networks offered, i.e., copper and fibre-optics. If no requirements were imposed with regard to Míla's fibre-optic network, Síminn's expansion on the retail level could become an even more attractive option.

The PTA's position

The PTA finds it difficult to understand the aforesaid comment submitted by Nova, which is not consistent with Nova's next comment submitted above. Nova is concerned about further expansion of Síminn's retail services, if no requirements are imposed with regard to Míla's fibre-optic network. The PTA reiterates that the authority imposes various requirements regarding Míla's fibre-optic network and will sustain them. Now the aforesaid ERT requirement will be added that shall apply to Míla, as well as to Síminn, which has been free from PTA requirements for many years. In the PTA's assessment, the aforesaid ERT requirement is likely to have an effect on price behaviour within Síminn Group, including Síminn.

Nova referred to paragraphs 84-93 in the additional consultation document, which address the intended requirements that shall apply to Síminn Group with regard to the elaboration of the ERT. In Nova's assessment, it was necessary to rely on that the process involved with the aforesaid ERT test would be efficient for all the parties concerned, i.e., that Míla and Síminn would deliver on their obligations and the PTA would swiftly provide analysis, monitoring and active responses/remedies as needed.

In light of experience in solving very slow-moving competition issues, Nova had doubts that enough was being done in order for obligations to function as intended. Síminn had repeatedly broken competition legislation and in these matters seemed to disregard settlements and other such in the market.

It was very unclear what measures the PTA had and could put in effect when it would come to light that the Síminn corporation's prices could not pass the test in question. It could be anticipated that this would begin a great obstructionism on behalf of the corporation, which would delay actions, but at the same time weaken other competitors in the market.

The PTA's position

The PTA agrees that the implementation of the ERT test must be successful and that resources available to the PTA if Síminn Group does not pass the test will be swift and efficient. The PTA reminds that interested parties will have the opportunity to comment on the implementation of the test before a final decision will be revealed.

GR said that in light of the fact that neither Míla nor Síminn differentiated between fibre-optics and copper in pricing, sales or marketing, it seemed odd that the PTA did not intend to impose obligations on Míla's fibre-optics. This was especially worrying in light of the fact that during the term of validity of the market analysis, Míla would be able to expand its fibre-optics network and most likely make all copper cables obsolete. Thus, the situation in 3-4 years could be that Míla, which would then still have SMP in the relevant wholesale markets, but without obligations. In these circumstances, Síminn's vertical integration would have to be considered. There would be no way for market participants to respond in time to actions that would then be possible for the Group. It had been shown that even if the ICA had fined Síminn for violating the arrangements of the sale of English football, it would have had little to no effect on the wholesale and retail telecommunications markets. Therefore, it had never been as important as now to support an active competitive market by adhering to the obligations for Míla, imposing obligations for Míla's fibre-optics as announced in the PTA's preliminary draft on April 30, 2020.

The PTA's position

GR is not correct in that no obligations will be imposed on Míla's fibre-optics. Various obligations have applied to Míla's fibre-optics in the relevant wholesale markets since the previous analysis in 2014, such as an access obligation, non-discrimination obligation, transparency obligation and an obligation for separation of accountancy. These will remain in force, in addition to the aforementioned ERT obligation which is new and in the PTA assessment will provide Síminn Group with significant restraint regarding pricing and other behaviour in the relevant wholesale and retail markets. GR is not correct in that Míla will phase out all copper networks in the analysis' term of validity, since Míla announced in 2020 that it would take 10 years. Also, GR is not correct that Míla does not differentiate between the pricing of copper and fibre-optics but is correct in that Síminn does not.

Hringiðan, Snerpa and Tölvun submitted a joint comment. The companies referred to Paragraph 84 in the additional consultation document and Míla's arrangements in for the sale of bitstream services.

Míla sold two types of bitstream, i.e., Access Option 1 (A1) and Access Option 3 (A3). When using A1, the price would have been cost-analysed by the PTA and each sold local loop priced so that the fee for Access Options switching was included in the price of the interface. When using A3, it was based on the same cost-analysis as A1, in addition to which a transfer from the relevant Access Option switching to BRAS/LNS was added, where the connection was handed over to an electronic communications company on an A3 interface.

Considering that each local loop could be up to 1 Gb/s, the "companies" considered it unnatural that Míla priced the A3 interface at a relatively high price compared to individual bitstreams. Thus, interfaces were now available that were either 1 Gb/s or 10 Gb/s. 1 Gb/s A3 interfaces were behind the times since when individual bitstreams would be 50Mb/s on VDSL and were then quite sufficient for that and sufficient if only VDSL was being resold on bitstream. If bitstream service for up to 1 Gb/s local loops and minimum of two 10 Gb/s interfaces would have to be used, perhaps even a few of those combined to ensure carrying capacity on individual bitstreams.

Despite the fact that the capacity of individual local loops had been increased up to 20 times without significant price changes, the price for A3 interfaces had remained the same. In order to ensure the competition referred to in the aforementioned Paragraph 84, there would need to be increased equality between electronic communications companies that purchased access on the one hand on the A1 and the A3 interface on the other hand. In the opinion of the company's margin squeeze due to this difference was such that electronic communications companies that used A3 found it very difficult to compete with electronic communications companies that used A1 due to the high cost of A3 interfaces.

In Míla's tariff for A1 it states that the price for the interface was included in individual bitstream connections, so that it does not collect separately for the interface. Although it was stated that if the interfaces were used for other purposes than for A1, they would cost 7,000 ISK a month.

The price for an interface on A3 were twofold. On one hand, for installation in the BRAS/LNS system, which was an initial fee. On the other hand, a monthly fee for the interface itself, which was 9,986 ISK for a 1 Gb/s port and 59,921 for a 10 Gb/s port.

It was pointed out that in Míla's current cost-analysed tariff for bitstream for interfaces for company connections, the price for a 1 Gb/s interface was 7,000 ISK and for a 10 Gb/s interface 35,000 ISK, cf. 42 in the PTA decision no. 6/2017. On page 45 in the aforementioned decision, it stated that Míla rented access to Síminn's MPLS network under A3 traffic. Interfaces for A3 (and company connections) were according to this taken from Síminn's MPLS network and it was difficult to see why the prices for the interfaces were different depending on whether they were for company connections or interconnections of electronic communications companies for A3. If anything, prices should be lower for interconnections of electronic communications companies. In chapter 2.8.2 in the aforementioned decision, it states:

"The PTA does not comment on the fact that Míla's price for interconnection of internet service providers with xDSL and Míla's GPON system for access route 3 will remain unchanged. These prices are based on Síminn's prices and there has been no change to those prices since Míla began providing

this service following the PTA's decision no. 41/2014 and therefore there is no occasion to change this tariff for the time being."

The companies considered that there were no objective arguments for the price for an A3 interface being much higher than for interfaces for company connections. For adequate results, Míla's customers with an A3 interface would need to have a minimum of two 10 Gb/s interfaces via separate routes to two different routers unless they were only selling xDSL connections. Then two 1 Gb/s interfaces would be sufficient.

Reports had been received that Síminn was transferring the operation of the IP-MPLS system to Míla at the turn of the year 2020/2021. If this were correct, there would no longer be an external cost for Míla due to these interfaces.

Míla had significantly increased the bandwidth of local loops in the access network with the availability of GPON services over fibre-optic local loops and xDSL services would now be subordinated to fibre-optic connections. This significant increase in bandwidth had not been substantially reflected in changes to the price of bitstream connections, but the bandwidth of interfaces had not increased accordingly, i.e., with the same price structure. Thus, the bandwidth of individual private users had been increased up to 20 times, but no changes had been made in regard to the interfaces. The buyers of A3 would have to respond to this by enlarging interfaces and therefore increasing costs to Síminn and Míla significantly, which skewed their competitive position considerably and increased margin squeeze. The "Companies" considered there were three options in the situation:

- Míla would increase the bandwidth available for interfaces tenfold without raising the price. The price for 10 Gb/s would then be 9,986 ISK and 59,921 ISK for 100 Gb/s.

- To match prices between company connections and A3 interfaces. The price for 1 Gb/s would then be 7,000 ISK and the price for 10 Gb/s would be 35,000 ISK. The "Companies" considered this price too high with reference to paragraph 84.

- The PTA would independently assess, with regard to Paragraph 84 and Paragraphs 86 and 87, which bandwidths and prices for interfaces would be available for A3. In the "Companies" opinion, care must be taken that if there were more than a few dozen connections involved, it would be necessary to assume at least 10 Gb/s interfaces that were priced so that there was no risk of significant difference in the cost of wholesale procurements and to ensure access and prices like the Competition Authority and EJAF, under the PTA's supervision, should do.

The PTA's position

The interfaces of Access Option 3 are a part of Míla's reference offer for bitstream access. The PTA can agree with comments that a 1 Gb/s interfaces are possibly behind the times and an increased capacity is necessary when users have access to up to 1 Gb/s bandwidth each. However, it is probably very rare that general users use such bandwidth in large proportions and then only for a very short amount of time. It can be pointed out that the GPON technology used by Míla shares 2.4 Gb/s to up to 128 users. It is not that each user is able to get unrestricted access to 1Gb/s speeds via Míla's GPON services, which is supported by the PTA's decision that the VDSL and fibre-optic connection are still substitutable, this is due to, among other things, users experiencing limited performance and quality between the networks.

The pricing of interfaces cannot be changed except following a review of the aforementioned reference offer. There is reason to review that item in the tariff, due to the transfer of the IP-MPLS system to Míla in the beginning of 2021. Whether this is done as part of a systematic review of the reference offer for bitstream services, or as a part of the project Míla will have to undertake, when they transform the IP-MPLS system into a wholesale product, will not be decided in this analysis.

The PTA has already requested information about the products Míla intends to offer wholesale through the IP-MPLS system. The subject of this comment is therefore already underway, and the PTA will be following up on that. A draft for changes to the reference offer will be submitted to a special consultation between stakeholders, and this will provide an opportunity for feedback.

5 Definition of Míla's Ljósína (optical line)

5.1 A discussion regarding the definition of Míla's Ljósína in the additional consultation document

121. In Chapter 3.2.3 of the first draft for the market analysis for Markets 3a and 3b, it was revealed that the PTA had disclosed the preliminary conclusions regarding the division of standard broadband access and high-quality access on a retail level, and that in Paragraph 167 it says that the PTA had not noticed that Iceland presented a situation, with regard to standard internet connections and high-quality connections, which was radically different from that which is seen elsewhere in the European Economic Area. As it will neither be deemed that there is demand-side or supply-side substitutability between these service types, the PTA considers that the distinction proposed in the ESA recommendation on the relevant markets applies in this country and that therefore standard internet connections on the one hand and high-quality connections on the other hand, will be considered to belong each to their own service market.

122. That, in Chapter 4 of the first draft, there could be found a discussion regarding the definition of relevant wholesale markets and that Chapter 4.2.3 covered the fibre-optic network, and that the products being offered were being offered wholesale on the local market. Where Chapter 4.2.8 contained a more detailed analysis of the PTA's preliminary conclusions on the available local access solutions for the relevant wholesale markets, where in 4.2.8.1 discussed Míla's products, and that Paragraph 240 revealed that it was PTA's preliminary conclusion that, after Míla had built a fibre-optic network for entire neighborhoods or sections of the city, PTA considered Ljósína to be a general product rather than an exception, and therefore it should be considered a local loop in wholesale market 3a.

123. The additional consultation document revealed that, with regard to those retail products which built on the wholesale products for the relevant markets 3a and 3b, Míla's Ljósína could not be understood to be a wholesale product of that kind and was not part of the most common supply chain for the standard products covered by the analysis, i.e. a three product chain where you would primarily have products on the market for fixed line local access, i.e. local loops, which could then be utilized as the basis for other product on the centralized local access market, i.e. bitstream. The bitstreams would eventually be purchased as a wholesale product from retail companies operating on the market for mass manufactured products, offering internet services and other related services to their customers, i.e., both for households and companies, and that those customers were content with such mass manufactured retail products. Míla's fibre-optic product was generally not being utilized as a wholesale product as part of that type of mass manufactured service.

124. Regarding Míla's Ljósína, those fibre-optic products were generally not being installed as part of the same investment projects as the general local loop networks being installed as part of Míla's universal rollout of fibre-optic networks. They were still subject to special orders and were only being installed as part of joint operations with shared costs of initial investment. It was therefore not the general distribution of fibre-optic cables for the company's access network that served as the basis for Míla's investment in the aforementioned Ljósína.

125. The PTA therefore intends to waive the change which had been announced in the first draft, which consisted of defining Míla's Ljósína as part of the general local loop network and Ljósína would therefore be defined as part of market 3a. In Míla's comments for the PTA's aforementioned initial estimate, dated July 10th, 2020, Míla had announced that they agreed

that Ljóslína should be defined as part of market 4 rather than market 3a. Míla's Ljóslína had until that point been defined as part of market 6 according to the numbering of 2008, i.e., the terminating segments of leased lines. The PTA therefore intended for Ljóslína to become part of market 4 according to the market numbering of 2016, i.e., high-quality local access, but that those marketing efforts were currently underway with the PTA.

5.2 Stakeholder comments on the PTA's definition for Míla's Ljóslína and the PTA's position on those comments

<p>Nova requested increased transparency in pricing, and particularly with regard to electronic communication companies.</p>

The PTA's position

The PTA will take comment of Nova's comment when providing an analysis of the aforementioned market 4, regarding high quality local access networks.

6 Criteria for areas with a reduced obligation framework

6.1 Discussion of criteria for areas where a reduced obligation framework will apply in the additional consultation document

6.1.1 General

126. The additional consultation document revealed that Chapters 6.7 and 7.7, in the PTA's first draft for market analysis of markets 3a and 3b, showed the institution's preliminary conclusions for geographic definition of the markets in question. Paragraphs 543 and 745 reveals that it was not necessary to ensure the exact same market conditions for different areas. It suffices that they were similar or sufficiently alike and for this reason it was only areas where competitive conditions are really “different” that cannot be considered to be the same geographic market.

127. Paragraphs 544 and 746 then revealed that it was necessary to estimate the *real* competitive conditions shall be assessed that are reflected in the market behaviour of electronic communications companies, for example with regard to their pricing and service offer, and the impact of this behaviour on the structure of the market, for example market share and network deployment. The task would therefore be to find out whether, within a specific country, there is adequate homogeneity between areas such that the country that could be considered to be a single market or whether competition conditions vary significantly between areas such that separate geographic markets should be defined or varying obligations imposed by geographic area.

128. Paragraphs 545 and 747 also indicated the need to explore the homogeneity of competitive conditions, among other things with regards to deployment of new electronic communications networks, market share, pricing, service quality, service offer, market behaviour, service characteristics and the nature of demand.

129. The PTA then concluded in Paragraphs 593 and 794 that there was reason to differentiate between different geographic markets locally, i.e., between the 6 municipalities that had been selected for further analysis in market 3a and 7 municipalities in market 3b on one hand, and the other municipalities in Iceland on the other hand. Competitive conditions were not sufficiently heterogeneous between these areas for this to be necessary. Though there is a certain difference in market structure between the areas in question, among other things with regards to deployment of the fibre-optic networks and market share, this difference is not reflected in behaviour of the Síminn Group or its competitors between these areas and is thus not passed on to consumers in the form of variations in price, quality, service offer and other parameters that should affect consumers if competitive conditions varied significantly between areas. The competitive pressure faced by Míla was therefore not sufficiently different between these two areas on the relevant markets to be considered significant.

130. In section 10.6 and 11.5 in the first draft, where there is a discussion of obligations, it was the PTA's conclusion that, nevertheless, there were sufficient variations in competitive conditions between these two areas to justify the imposition of varying obligations on Míla in the areas in question.

131. Paragraphs 1290 and 1673 revealed that, in Chapters 5.1 and 6.1 in the draft, it was stated in an accompanying document to the EU Commission recommendation on the relevant markets that in those instances where NRAs could not identify sufficiently heterogeneous competitive conditions between areas that were sufficiently stable over time, that would justify segmentation of geographic markets, it would be possible to impose varying obligations on an SMP operator that operated across the whole country by geographic area. This would then be a response to the existence of varying competitive pressures that the SMP operator would face by geographic area, e.g., varying infrastructure competition by geographic area, but the competitive conditions would not be sufficiently different to justify separate geographic markets.

132. Paragraphs 1291 and 1638 of the first draft then revealed that in the BEREC's Common Position on geographic parameters of market analysis from 2014 there had also been a discussion on the possibility of imposing varying obligations on an SMP operator depending on area in order to tackle varying the competitive between areas should there not be grounds for dividing a specific service market into more than one geographic market.

133. In Paragraphs 1295 and 1642 in the first draft, it was revealed, on the basis of the PTA's analysis of geographic markets in Chapters 6 and 7, and the possible and real competitive issues which the PTA had defined for the relevant markets, which were disclosed in Chapters 10.2 and 11.2, the PTA did not consider it justifiable to take major steps in this instance on elaborating varying obligations for the two areas that the PTA selected for further analysis. Given the indications described in the aforementioned chapters on competition issues, including with regards to alleged damaging price policy of the Síminn Group, the PTA did not consider it possible to prescribe varying obligations on price control for Míla based on geographic areas.

134. In Paragraph 1296 of the first draft, the PTA concluded that it was possible to lift 3 obligations that related to access obligations, in this instance, for those 6 areas that the PTA defined as areas with greater competition in market 3a, i.e., Reykjavík, Seltjarnarnes, Skútustaðahreppur, Svalbarðshreppur, Grýtubakkahreppur and Tjörneshreppur. The obligations in questions, that would not apply to Míla in those municipalities were: 1) Access to conduits and ducts, 2) Míla's duty to advertise with respect to civil works and 3) the rule on 5 year notice to inform about migration in network systems. Paragraph 1643 then revealed that the rule on notice to inform about migration in network systems would not apply in Míla's case, for the aforementioned 6 areas and, also, in the municipality of Ölfus in market 3b.

6.1.2 The PTA's initial estimate for areas with reduced obligations should apply to markets 3a and 3b

135. It was further outlined in the additional consultation document in Paragraphs 548 and 750 in the first draft, that in the ESA and BEREC guidelines, it was stated that in order to avoid a huge number of small markets, it could be useful to group them in separate units for those areas where comparable competitive conditions existed, often in such a way that one unit was comprised of areas with more competition and the other area would have little or no competition. Competitive conditions between the units in question were then further analysed with regards to whether it would be justifiable to apply geographic measures, i.e., whether to either segregate geographic markets, or to apply varying obligations between geographic areas.

136. In Paragraphs 550 and 752 in the first draft, it was disclosed that according to BEREC's Common Position on geographic analysis from 2014, which was still in full effect, it is stated

that when selecting areas for analysis, the selected areas need to fulfill set criteria, that they would, among other things, need to be smaller than the country as a whole and be mutually exclusive with regards to competitive conditions, with clear and stable boundaries, and that they are sufficiently small for competitive conditions to be unlikely to change significantly within them, but sufficiently large to prevent an excessive burden on market players and NRAs. The advantages and disadvantages of the applicable methodologies were to be analysed when segmenting into areas. The method best suited to the above criteria would be selected.

137. Paragraphs 556 and 758 in the first draft revealed that it was necessary to locate a sensible and useful criterion for the selection of geographic areas that were to be examined, before it becomes possible to assess whether the areas can be segmented with respect to potentially significant variations in competitive conditions between them. Paragraphs 557 and 759 further states that instead of embarking on a detailed and time-consuming assessment of competitive conditions for each municipality in the country, and they are 69 in total, the PTA considers it to be a more useful and appropriate method to define clear criteria on how to group the areas, i.e., on the one hand into areas with little or no competition and on the other hand into areas with more competition. Given the situation in Iceland, the PTA considered it important to base such a grouping on more than one criterion. In accordance with the aforementioned BEREC document, the PTA did not consider it important to determine whether the area in question is an operational territory of GR or Tengir, and that they could be grouped together as far as the competitive conditions between the municipalities in question were homogeneous.

138. Furthermore, Paragraphs 558 and 760 reveal that, in the opinion of the PTA, municipalities are the most appropriate units to use as the basis for geographic analysis, given the structure of the markets in Iceland and other local competitive conditions.

139. As stated in Paragraphs 561 and 763 of the first draft, the BEREC reports stated that generally there needed to be more than one network as competitor of the SMP operator for it to be possible to consider that effective competition, or at least significant competition, could exist on the relevant market. In Iceland it is generally the case that there is only one network competing with Míla in each area and it is assumed that this situation will not change during the lifetime of this analysis. Large but rather sparsely populated areas, however, have no such intra-platform competition. To segment the areas into units with little or no competition on the one hand and units with more competition on the other hand is normal in the opinion of the PTA in the light of conditions in this country today it is appropriate to base such segmentation on rather strict criteria, among other things to allow for significant deployment of networks of Míla's competitors, as there is generally only one such network where they operate.

140. Finally, Paragraph 562 of the first draft states that the PTA plans to classify areas with more competition in market 3a as areas where the following three conditions are fulfilled in the municipality in question:

- That there is an existing fibre-optics network that provided competition to Míla in the area in question and that it covered at least 75% of the domiciles and companies in that area.
- That Síminn's market share on the retail market for broadband service is under 40%.
- That Míla's market share in leasing of local loops is under 50%.

141. The municipalities that met these criteria were Reykjavík, Seltjarnarnes, Skútustaðahreppur, Svalbarðsstrandarhreppur, Grýtubakkahreppur and Tjörneshreppur.

142. In Paragraph 764 of the first draft, it is stated that the PTA intended to base an area with greater competition in market 3b on the first two conditions, but not on the condition that Míla's market share in renting out local loops or bitstreams must be less than 50%. The municipalities that met these criteria were the same that concerned market 3a, with the addition of the municipality of Ölfus.

6.1.3 New plans regarding the selection of areas with reduced obligation should apply to markets 3a and 3b

143. As is stated in Chapter 6.1.2 above, the PTA used a rather strict criteria when selecting areas for further analysis, in consideration of the application reduced obligations in areas with greater competition. The conditions had been even stricter in market 3a than in 3b, where it had also been stipulated that Míla was not permitted to have a market share in excess of 50%.

144. Following a consultation on the above first draft and further data collection, the PTA announced that they would not be altering their plans to not impose conditions of separating the markets in question geographically, but rather to impose conditions that would vary based on geographic area, as had been the assumption in the first draft. Neither did the PTA, based on the competition problems that have been defined in the aforementioned markets, suggest that changes need be made to those obligations, defined in the initial estimate, which were said to not apply to the areas where a greater level of competition had been defined. The PTA did draw attention to fact that the condition that the Síminn corporation would need to pass an Economic Replicability Test (ERT), which the PTA suggested would apply, gave the corporation greater leeway in pricing within that obligation, compared to the obligation that a pricing analysis be made for Míla's fibre-optic cables, which had been the assumption in the initial estimate. This references Chapter 4 above, with regard to those PTA plans.

145. As the markets will not be divided geographically, but only areas with differing levels of obligations, which would only extend to certain components of the access obligation, and, in light of previously-made comments, following the initial estimate and the data collection the PTA did following that estimate, the PTA believed there was cause to reduce those obligations which would need to be in place so the municipality could be categorized as an area with a higher level of competition.

146. As there are generally only two parties operating electronic communication networks (copper or fibre-optic) in Iceland, including Míla's network, in areas which had any competition at all, the PTA did not intend to change the criteria that Míla's competitors would need to have approximately 75% coverage. As is stated in the initial estimate, it is the estimate of BEREC and the majority of the PTA's sister institutions in Europe, that networks from at least three competitors would be required to ensure active competition.

147. However, it varied in Europe, whether the criteria on market share of parties with considerable market power was set at 40% or 50% on a retail level. The principle in competition and telecommunication regulations was that if a party had a market share that was 50% or greater, there would have to be a great deal of mitigating factors for one to be able to conclude that this party was not in a market dominant position. In light of the above, as well as comments submitted following the consultation on the initial estimate and data obtained by the PTA

following that and with regards to proportionality, the PTA intended to waive the requirement that Síminn must be under 40% in market share in retail and instead use 50% for reference.

148. As detailed above, the PTA proposed a third requirement for market 3a that Míla's market share could not be over 50% in the relevant area. At present, the PTA did not consider this requirement necessary considering the current competitive conditions in the country. There was a significant correspondence between Síminn's lower market share in retail and Míla's market share in market 3a, due to Síminn Group's vertical integration. In addition, this was not a requirement that was generally based on at the PTA's sister institutions in Europe and the PTA therefore considered there to be more proportionality in dropping this requirement which, as previously stated, only applied to market 3a but not market 3b.

149. The PTA therefore intended to use the two requirements below as reference for markets 3a and 3b:

- That there was an existing fibre-optics network in competition with Míla in the relevant area with at least 75% coverage of homes and companies in that area.
- That Síminn's market share on the retail market for broadband service was below 50%.

150. These intended changes would lead to the number of municipalities that fulfilled the requirements to increase from 6 in market 3a and 7 in market 3b to 15 in each market. These would be the same municipalities, and they were:

1. The City of Reykjavík
2. Seltjarnarnes
3. Kópavogur
4. Garðabær
5. Hafnarfjörður
6. Mosfellsbær
7. Akranes
8. Ölfus municipality
9. Town of Hveragerði
10. Ásahreppur
11. Flóahreppur
12. Svalbarðsstrandarhreppur
13. Grýtubakkahreppur
14. Skútustaðahreppur
15. Tjörneshreppur

151. These 15 municipalities represented 22% of municipalities in Iceland but nevertheless around 70% of the country's residents lived there at the turn of the year 2019/2020. The preliminary draft assumed that just under 10% of the country's municipalities would be subject to reduced obligation framework, where around 39% of the country's residents lived¹⁵.

6.1.4 Annual update of list of municipalities that fall under areas with a reduced obligation framework

152. In order to ensure that competitive conditions within municipalities reflected the aforementioned criteria at that time, the PTA stated its intention of making an annual decision in the term of validity of the analysis on an update of the list of municipalities that fulfilled the aforementioned criteria. The first such decision would be made in early 2022, based on the status at the turn of the year 2021/2022, following national consultation and consultation with ESA.

6.2 Stakeholders' comments regarding criteria for areas with a reduced obligation framework and the PTA's position on them

The **Competition Authority** commented that the preliminary draft stated that competitive conditions in wholesale markets 3a and 3b were not so different that there was an occasion to divide the country into more than one geographical market. Therefore, the geographical market of the analysis was Iceland as a whole. Although the PTA intended to impose a reduced obligation framework on Míla in areas with more competition. The three requirements for increased competition in the relevant municipality would be discussed further in paragraphs 113 and 114 in the additional consultation document.

In the PTA's additional consultation document, the institution had called for opinions on the changes to the requirements of increased competition for a reduced obligation framework for SMP companies.

The Competition Authority stated that for requirements for increased competition areas in markets 3a and 3b, the PTA intended to base one of its requirements on that Síminn would be below a 50% market share on the retail level instead of the 40% of market share previously used. The Competition Authority commented on these intended changes.

With regards to the criteria for Síminn's retail share, a company could be considered to be SMP in competition law even if it had a below 50% market share in the relevant market. It was correct that in all likelihood this would happen, and in fact there was a prima facie likelihood that a company had SMP when it had half of the market share. There were examples of SMP's with lower market shares, in fact all the way down to 32% share, cf. e.g., the Court of Justice of the European Union's verdict in case no. C-250/92 (*Göttrup-Klim et al. vs. Dansk Landbrugs Grovvarereselskab AmbA*). What was more important was that factors other than market share would also have to be considered when assessing market power, cf. e.g., paragraph 12 and 14 in "*Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings*, OJ [...] C 45/7:

¹⁵ Registers Iceland new item from January 2, 2020.
<https://www.skra.is/um-okkur/frettir/frett/2020/01/02/Ibuafjoldi-efrir-sveitarfelogum/>

"The assessment of dominance will take into account the competitive structure of the market, and in particular the following factors:

Constraints imposed by the existing supplies from, and the position on the market of, actual competitors (the market position of the dominant undertaking and its competitors),

Constraints imposed by the credible threat of future expansion by actual competitors or entry by potential competitors (expansion and entry),

Constraints imposed by the bargaining strength of the undertaking's customers (countervailing buyer power). [...]

The Commission considers that low market shares are generally a good proxy for the absence of substantial market power. The Commission's experience suggests that dominance is not likely if the undertaking's market share is below 40% in the relevant market."

As a result of the above, in competition law a 50% market share was generally considered to entail a prima facie likelihood that a company had SMP and that competition authorities could assume as such except in special circumstances, and the burden of proof of the opposite would lie with the relevant company, and in accordance with the above specified guidelines by the EU Commission a dominant position in the market was unlikely if market share was below 40%. It is also important for factors, other than the market share, to be taken into consideration when estimating the market power of the company, such as entry barriers, economic strength, economy of scope, vertical integration of the relevant company and its group, etc. according to, for example, Richard Whish, Competition Law, 9th printing, page 191-192.

The first draft also drew conclusions based on the number of connections rather than the revenue, as would be the main principle in competitive law, and which the local competition authorities would have used to address the matter. It is uncertain what effect this factor would have when estimating the market power of the Síminn Group. Although the aforementioned pricing of line charges would indicate a potential transfer of market power from the wholesale market to the retail market.

The first draft discusses Síminn Group's market power in relation to factors other than market share. Chapter 8.4.10 compiles the PTA's conclusion with regard to access barriers on the local loop market 3a, and put simply, the PTA concluded that the dominant position would constitute an access barrier, sunk costs in investment to build up its own access network presented a significant hurdle for new companies in the market. This is due to the Síminn Group possessing an economy of scale and scope, which the competing businesses would not be able to equal over the time period in the analysis. The capital would need to be patient, and the scope of Míla's service system gave the company an advantage, and that Míla benefited from the vertical integration of Síminn Group. In Chapter 9.4.10 in the first draft, the PTA came to the same conclusion regarding access barriers in market 3b.

The first draft had revealed that Míla did not have to suffer the same degree of countervailing buying power as its competitors, as the parent company, Síminn, was Míla's largest client by far, as 70% of their total revenue came from Síminn. This also reduced the bargaining power of other service providers, as well as the countervailing buying power on the market due to the ownership link between Míla and Síminn, the amount of business being done between the two companies, and the prevailing market dominance of Síminn in the retail field.

The PTA's analysis of access barriers in wholesale markets 3a and 3b was according to the preliminary conclusions of the Competition Authority when investigating cases in relation to

Síminn Group. In the Competition Authority's Document of Protest due to an investigation into the marketing of English Premiere League football packages and the Síminn Sport package, the Authority concluded in its initial estimate that Síminn had an advantage over its competitors due to the company's considerable economy of scope. With regard to the company's economic strength, it had been the Competition Authority's initial conclusion, that Síminn Group benefited from its economic and financial superiority over the Group's competitors.

Where another condition for expanding competitive areas was based solely on market share, and did not account for other factors, such as access barriers, which could have an equally significant effect when estimating market power, if the Competition Authority was unable to reach the same conclusion as the PTA did in Paragraph 116 in the additional consultation document, that the Authority had based its findings on rather strict criteria in the first draft of their market analysis. On the contrary, one could argue that an advantageous concession had been made by raising the second requirement for increased competition from Síminn's 40% market share to a 50% market share. By referring to these factors, it was probably more appropriate to base it on Síminn's 40% retail market share, when exclusively observing the market share, so that reduced obligations may be placed on the Group due to its significant market power.

The PTA's position

The Competition Authority criticized the PTA's decision to base the second requirement on the municipality being included in an area with greater competition with Síminn's 50% market share in the retail market for broadband services, instead of the 40% in the first draft.

Through its analysis, the PTA concludes that Míla has a significant market power in the relevant wholesale markets in Iceland. When making that estimate, the PTA reviewed all the factors which Competition Authority mentions above. By basing the second requirement, for reduced obligations for Míla in certain municipalities, on Síminn's 50% market share in the retail market for broadband services, the PTA is not maintaining that a smaller market share than that may not lead to a market dominant position. This only concerns the easing of a portion of Míla's obligations in certain municipalities, where the company is facing greater competition than in areas where it has little to no competition. However, the PTA emphasizes that, according to PTA's estimate, Míla has significant market power in the entire domestic market. In the municipalities in question, where the deployment of competitors' networks is 75% or greater, the obligations in question are not as important as in other areas. The PTA also emphasizes that several NRAs in the EEA areas have used a 50% market share in the retail market as the basis for their conclusions in this regard, and the European Commission has not commented on this as such. The PTA therefore concludes that the Competition Authority's criticism may be based on a misunderstanding in some regards. If not, then the PTA considers the Competition Authority's concerns in this regard to be unnecessary, as it is not possible to draw too broad of a conclusion based on this isolated factor when making the analysis.

It is stated by the Competition Authority's, that in the first draft conclusions are based on the number of connections rather than the revenue, as would be the main principle in competitive law, and which the local competition authorities would have used to address the matter. It is uncertain what effect this factor would have when estimating the market power of the Síminn Group. Although the pricing of line charges would indicate a potential transfer of market power from the wholesale market to the retail market.

The PTA based its market share data on the number of connections in the last market analysis of 2014 for the wholesale markets in question and is doing that again now. This is primarily due to the level of complexity involved in gathering sufficient data on turnover figures, as the overwhelming majority of market 3a is internal sales between the aforementioned telecommunication infrastructure companies.

The Competition Authority said that the PTA intends to discontinue the use of the third condition for increased competition in wholesale market 3a, that Míla's market share cannot be above 50% in a given area, according to Paragraph 121 in the additional consultation document, so that it would only consider the deployment of other networks and Síminn's retail market share. In the PTA's opinion, this condition was not necessary based on the current market conditions in Iceland, as there was significant correlation between Síminn's lower market share in the retail market and Míla's market share in market 3a due to the Group's vertical integration. In this context, the Competition Authority pointed out that in Paragraph 78 of the additional consultation document, it was specifically referenced that, during the reevaluation of price control obligations, Síminn came to an agreement with GR regarding access to the company's fibre-optic network to strengthen GR's position in the concerning markets, even if the extent of the business relationship between Síminn and GR was unclear. The Competition Authority comments that this development, which the PTA referred to, could to some extent bridge the gap in the electronic communication market, with regard to the ownership of access network and the supply of retail products, and thereby reduce the correlation and correspondence between Míla's and Síminn's market share, which the PTA refers to. Furthermore, the media had reported that representatives of Vodafone had detected opportunities presented by the potential changes to the company's operation, such as by selling infrastructure to improve the company's asset utilization.

Furthermore, the Competition Authority stated that, according to the settlement they made with Síminn and Míla, disclosed in the Competition Authority's Decision no. 6/2015 on the organization of Síminn Group, Míla's role in the ownership and management of electronic communication systems would be independent. Thereby, Míla's commercial policy was to be formed independently, and Síminn and Míla to be separated, with a few exceptions. Although the Competition Authority has made a recent decision regarding infractions against the current settlement and was investigating other cases against Síminn, the Competition Authority concluded that the removal of the third condition for increased competition in market 3a on behalf of the PTA, with reference to the equivalence in Síminn's and Míla's success, did not confirm fully to the conditions and goals of the agreement regarding Míla's independence and credibility in the electronic communication market, with reference to the organization of the Síminn Group. Therefore, it is requested that the PTA reconsider, or take into account those comments when making a final decision on changes to the conditions for increased competition in specific areas.

The PTA's position

As stated in the additional consultation document, this condition is not used extensively by the European NRAs. In light of the positive developments in the Icelandic electronic communications market which have taken place since the first draft was submitted for consultation at the end of April 2020, including the agreement between Síminn and GR concerning Síminn's involvement in GR's fibre-optic network, which came into effect on 25 August 2021, and the reduction in the harmful effects of Síminn's TV services, the PTA concluded that the application of this condition was not proportional. Despite the agreement in question, between Síminn and GR, the PTA felt it was evident that the majority of Síminn's

connections will continue to be with Míla, and therefore this correlation between Síminn's and Míla's market share would not be significantly disrupted during the time frame of this analysis, except in the case of other major, unforeseen changes to the structure of the market or competitive conditions. The PTA considers that the revocation of this condition will not achieve material changes to those obligations the Síminn Group has undertaken towards the Competition Authority in the aforementioned settlement.

The PTA reiterates that those conditions, which the authority intends to lift in the relevant municipalities, are relatively minor in context with the general context of imposed obligation, with the revocation of the access obligation for ducts and conduits being the most significant one due to the reduced access Míla's competitors have to the company's infrastructure. Therefore, the PTA does not see a reason to reintroduce this condition at this time. If the market structure or competitive conditions change radically in other ways in Iceland, such as if Míla was sold away from Síminn, then the PTA concludes that this condition could be applied at a later date, whether it will be in the next planned analysis after three years, or at some point before that.

Míla considered it appropriate to reiterate prior comments regarding new criteria when evaluating market areas. The Icelandic markets are localized, and market conditions vary greatly across the country. Míla has shown that the pricing differed by area. Despite the PTA having reduced the conditions needed for a municipality to be regarded as an area with greater competition, it was Míla's assessment that the reduced obligation framework did not correspond to examples abroad, where one could see considerable differences in obligation from one area to another. Furthermore, the obligation did not take into account Míla's actual status in those markets.

Finally, the PTA was still making excessive demands to competitive areas, with regard to criteria for the expansion of Míla's competitors in light of conditions and foreseeable developments in the market during the time frame of the analysis.

The PTA's position

The PTA refers to its previous responses in Chapters 6 and 7 in Appendix B, as well as the corresponding chapters in the updated draft (Appendix A) regarding Míla's reiteration of the request to divide the local geographic markets and their comment that the reduced obligation were not sufficiently different from the obligations in those areas where all obligation applied, and that this did not correspond to how these matters were being implemented outside of Iceland.

The PTA does not deem excessive its coverage requirements for networks other than Míla in its first condition, which is set at 75%. The PTA considers it necessary to set that criteria rather high, e.g. due to the fact that, in Iceland, Míla is not facing competition from more than one competitor in each municipality, where one existed at all. The PTA considers this even more important after the institution announced its plans in the additional consultation document, to not apply the third condition for market 3a, i.e. regarding Míla's 50% or greater market share, as well as an easing of the second condition, so that it be based on Síminn's 50% or greater market share in the retail market for broadband services, instead of 40%, as well as not applying the imposition of performing a cost analysis of Míla's pricing of fibre-optic cables and, instead, impose an ERT obligation on Síminn Group.

Míla believed that the PTA still intended to impose obligations on Míla on the local loop market in municipalities where Míla was not managing active local loops.¹⁶ This was a considerable number of municipalities where a fibre-optic rollout had been or was in the process of being, conducted by *other parties* than Míla, and Míla would shortly discontinue the current copper system in these areas. Míla concluded that this could not hold up to scrutiny, with regard to proportionality, by imposing such extensive obligations on a company in areas where they did not own infrastructure.

Furthermore, Míla has pointed out that, in addition to the numerous municipalities above, where Míla would need to uphold obligations for market 3a without owning infrastructure in that market, there would be large areas of land within a number of other municipalities where Míla would be in the same position. Míla reiterated its reasoning in this regard and considers it necessary to use area codes as the criteria for evaluating market conditions in Iceland, which were characterized by extensive support from the Icelandic government for the installation of fibre-optic cables in rural areas.

The PTA's position

The PTA refers back to previous responses, including the one in Appendix B, to a comparable criticism from Míla. There it was clarified that the company intended to phase out its copper network over the coming 10 years. The PTA believes that during the time period of this analysis, this will primarily take place in areas where the company has installed its own fibre-optic network. Those areas that may be an exception to that principle are areas that are sparsely populated and rural, and therefore are of little importance in the greater context. Obligations on the company in such areas cannot be onerous since they will not apply there in actuality.

Furthermore, it should be considered that Míla has gained dominance over numerous rural networks that the company has not deployed itself, either by purchase, long-term lease or operational agreements. The PTA considers it likely that this development will continue to some extent. Therefore, it is not out of the question that obligations will be needed in areas where municipalities have invested in fibre-optic cables and Míla will discontinue its use of copper local loops.

The PTA refers to its detailed response in Appendix B, as well as the discussion in Chapters 6 and 7 in the updated preliminary draft (Appendix A) in regard to the PTA's arguments for why the institution considers municipalities to be more a convenient unit in Iceland than postcodes when it comes to choosing areas for further analysis and reference regarding reduced obligation framework.

Míla considered it proper to reiterate that the reduced obligation framework the PTA intended to impose on Míla, did not entail much leniency in practice. The difference between a reduced obligation framework and "other" obligations was in fact minimal and the effects of different obligations were similarly little to non-existent. The difference between obligations would have to be real and that was the purpose of the framework. Thus, 70% of homes fell under these

¹⁶ Hörgársveit, Kjósarhreppur, Skeiða- og Gnúpvörjahreppur, Helgafellshreppur, Eyja- og Miklaholtshreppur, Skorradalshreppur, Húnavatnshreppur, Þingeyjarsveit, Fljótsdalshreppur, Árneshreppur, Bolungarvíkurkaupsstaður, aside from previously-listed municipalities, such as Ásahreppur, Flóahreppur, Svalbarðsstrandarhreppur, Grýtubakkahreppur, Skútustaðahreppur, Tjörneshreppur and Hrunamannahreppur.

reduced obligations, but in fact Míla did not consider there to be grounds for obligations in such areas.

The PTA's position

The PTA has responded to a comparable comment above, as well as in Appendix B and refers to that. The PTA cannot agree that a localized removal of the obligation for access to ducts and conduits is not significant for Míla, as it would save the company considerable work.

Míla said that the PTA's intended changes, included in the additional consultation document, seemed to some extent to meet Míla's submitted comments on the preliminary draft by imposing a reduced obligation framework. Míla welcomed such changes, as far as they went.

However, Míla stated that the PTA suggested relieving the requirements for the selection of areas with a reduced obligation framework, i.e., on the condition that an operator other than Míla had coverage for over 75% of homes/companies and Síminn was below 50% in market share. With this change the municipalities where the reduced obligation framework would apply had become 15 in total. These municipalities covered 70% of the population. In other words, Míla was thus subjected to continuing obligations in the majority of the market, and in fact, without consideration of the fact that Míla's (and where applicable Síminn's) competitors had a bigger market share.

The PTA's position

In the additional consultation document from October 30, 2020, the PTA reached the conclusion that reduced obligation framework would be applied in 15 further specified municipalities. These may include:

1. The City of Reykjavík
2. Municipality of Kópavogur
3. Seltjarnarnes
4. Garðabær
5. Hafnarfjörður
6. Mosfellsbær
7. Akranes
8. Svalbarðsstrandarhreppur
9. Grýtubakkahreppur
10. Tjörneshreppur
11. Skútustaðahreppur
12. Town of Hveragerði
13. Ölfus municipality
14. Flóahreppur
15. Ásahreppur

Furthermore, it was stated in the additional consultation document that the PTA would review the list of such municipalities annually. As Míla has pointed out, the data on the deployment ratio of electronic communications networks in Iceland that the PTA has considered, has so far been proven to be rather inaccurate. This is based, among other things, on the fact that the relevant municipalities are responsible for reporting homes and companies to Registers Iceland and have not all been diligent in providing accurate information. In particular the total number of companies in a municipality has been subject to error. In recent months this data from Registers Iceland has become more accurate than before. After the PTA obtained more accurate

data it was revealed that three additional municipalities fulfill the requirements considered by the PTA, i.e., Ásahreppur, Flóahreppur, Rangárþing Ytra and Skeiða- og Gnúpverjahreppur. However, it has been revealed that the deployment in Skútustaðahreppur was significantly less than the PTA was previously informed, or 57%.

Taking the above into account, the reduced obligation framework would also apply to the three aforementioned municipalities, but not to Skútustaðahreppur. Therefore, the reduced obligation framework will apply to Míla in the following 17 municipalities, until the next update of the list in the beginning of the year 2022:

1. The City of Reykjavík
2. Municipality of Kópavogur
3. Seltjarnarnes
4. Garðabær
5. Hafnarfjörður
6. Mosfellsbær
7. Akranes
8. Svalbarðsstrandarhreppur
9. Grýtubakkahreppur
10. Tjörneshreppur
11. Town of Hveragerði
12. Ölfus municipality
13. Flóahreppur
14. Ásahreppur
15. Fljótsdalshreppur
16. Rangárþing Ytra
17. Skeiða- og Gnúpverjahreppur

The reduced obligation framework will therefore apply in regard to connections in over 70% of spaces (homes and companies) and 25% of municipalities in Iceland.

Míla also stated that the company thus subjected to continuing obligations in the majority of the market, and in fact, without consideration of the fact that Míla's (and where applicable Síminn's) competitors had a bigger market share. The PTA has responded to a comparable comment numerous times and refers to previous responses above, the updated preliminary draft (Appendix A) and Appendix B in that context.

Síminn stated that it was comment worthy that the PTA currently defined around 70% of the market with reduce obligations and applied the approach that existing access networks other than Míla's covered 75% of homes or more in the relevant municipality and Síminn's market share was below 50%.

Nevertheless, considerable obligations were imposed on areas where Síminn had below 50%, and even below 40%, market share, as well as areas where Míla had below 50%, and even below 40%, market share. Naturally, Síminn could not consider there to be legal requirements for obligations in these areas, even though the markets were not geographically defined, and at the same time obligations were not imposed on companies that had a bigger market share than Míla. Síminn believed that it was important to submit an analysis on the probable development of copper networks in different areas and consider obligations on the basis of such development.

Nevertheless, the PTA maintained that there was not a "significant" difference in competitive requirements between municipalities where GR operated, where Tengir operated and other areas. The PTA had also not taken into account the fact that there was an overwhelming probability that Tengir and GR would increase their share in the next 2-3 years.

Síminn's position was that on the wholesale level the markets were geographically separated. Therefore, Síminn could in no way understand how it was possible to maintain that a market where Tengir had over 60% market share, and a growing share on one hand, and on the other hand areas where Tengir had 0% market share, e.g., in East Iceland or the North-West, did not contain a significant difference. It was also apparent that in areas where copper connections were in the majority (almost 100%) and in the North-East, where copper connections were now in the minority, did not contain a significant difference in competitive requirements.

The same views applied to GR's operating areas. GR had operations in Reykjavík and the surrounding areas and had 52,000 active connections in 2019 out of 102,000 connected homes, and therefore a 50% share where the company operated but 0 connections outside that area and consequently no market share.

This could refer to shares in the number of connections, but considering turnover, which was a natural indicator of market share, then Tengir's share was even bigger, and the same was true for GR. This was due to the fact that Tengir charged around 2,500 ISK for each local loop, straight to the end user. GR charged electronic communications companies around 2,400-2,600 ISK for each local loop but Míla currently charged around 2,000 ISK for each fibre-optic local loop (previously 1,970 ISK) and 1,558 ISK for a copper connection. Thus, it was clear that market share in turnover in the relevant areas was even bigger, in GR and Tengir's favor.

The existence of areas where two operators (GR and Tengir's operating areas) or more (Reykjanesbær) were present can hardly be argued, and the fact that they are considerably different from areas where only one operator provided local loop lease. Despite there being a significant difference between Míla's market share in the areas in question, close to 100% on one hand or under 40-50% on the other. The pricing was also different between areas. One example is as there are copper connections being offered there is only price available, i.e., 1,558 ISK, but as Tengir was operating the rent for a local loop as approx. 2,500 ISK without VAT with Tengir (not being offered wholesale), but over 2,000 ISK in the case of Míla. In the GR area, GR's access fee is approx. 2,600 ISK without VAT, while at Míla it is just over 2,000 ISK. GR's wholesale price for fibre-optic connections was therefore 60-70% higher than the most common wholesale price for local loops in East Iceland, to take one example.

It is clear, when looking at the new draft from the EU Commission on market definitions on the electronic communication markets, that as there already existed significant differences in market share between areas currently, the markets should be defined locally. The same would apply if an area had the same number of competitors, but different parties, as odds are that these would be separate markets, cf. Tengir's area and GR's area. By Síminn's estimate, there is every indication that markets 3a and 3b must be defined geographically and it seemed that the PTA's additional consultation, if anything, strengthened Síminn's position on this.

The PTA's position

The PTA reiterates that, according to the last response previously, it will be 17 municipalities out of 69 where reduced obligations will apply to begin with, or until the list is reassessed at

the start of 2022, and then annually after that throughout the term of this analysis. This constitutes 25% of the country's municipalities, where over 70% of the population lives.

By selecting areas for analysis, two conditions are currently being employed, i.e., on hand that the deployment of competing electronic communication networks, other than Míla, has reached a deployment of at least 75% and, on the other hand, that Síminn's market share is 50% or less in the retail market for broadband services. The PTA considers this methodology and this interaction of conditions to be important and in accordance with the guidelines and/or recommendations from the EU Commission and BEREC and how they are implemented all over Europe. The ratio in question, for the two conditions, reflects, according to the PTA's estimate, sufficiently differentiated forms of competitive pressure which the Síminn Group is facing in the two areas, i.e., in areas with little to no competition and in areas with greater competition. The different forms of competitive pressure are not sufficient, by the PTA's estimate to differentiate between geographic markets in Iceland, as they reason at length in their analysis.

The PTA then emphasizes that the institution had, in its first draft, planned to base their deliberations on Síminn's 40% market share, but in the additional consultation document the PTA announced their intention to raise that share to 50%, and the PTA claimed to intend to revoke the condition for Míla's 50% market share in market 3a. With that, the municipalities where the reduced obligations apply proliferated significantly. Furthermore, it is important to consider that the PTA announced its plans to revoke the obligation for cost analysis of Míla's pricing for fibre-optic connections, and it is that obligation which the Síminn Group was most critical of in their criticisms during the first draft consultation.

This methodology will unavoidably and naturally lead to the situation where for certain municipalities, the full obligations will apply, despite Síminn or Míla having less than 50% market share, i.e., if the fibre-optic deployment of Míla's competitors is under 75% in the municipality in question. The PTA considers, in light of the fact that generally speaking Míla only has one competitor in each municipality and sometimes none, that the rate of roll-out needs to have become considerably high in order to enable an acceptable level of competition for the municipality to be assessed as belonging to the category of less stringent requirements. The PTA also points out that Síminn and Míla are a single economic unit in the sense of the Competition Act, and therefore it is necessary to base the conditions on criteria connected with both the wholesale and retail arms of the group.

Síminn believes that it is important for the PTA to submit an analysis on the probable development of copper networks in different areas and consider obligations on the basis of such development.

In an updated analysis (Appendix A), the PTA has discussed Míla's plans for the next 10 years regarding the phasing out of the copper system. As aforesaid, it is the PTA's assessment that during the lifetime of the analysis Míla will primarily be dismantling copper systems in places where the company has already installed its own fibre-optic cable. Rather than embarking on a thorough and time-consuming analysis of those plans, involving the many municipalities of the country, which could never be very precise due to the many uncertainty factors, the PTA considered it more important to stipulate annual updates of the list over municipalities where less stringent requirements will apply. That list will be a useful indication of the actual level of competition in the country's municipalities based on the requirements which the PTA applies when selecting the areas.

As regards Síminn's comments regarding the company's opinion that the relevant domestic wholesale markets should be separated geographically, this is a repeated comment. The PTA refers to its answer to the comparable comments in Appendix B. The same applies to statements regarding the strength and position of Míla, GR and Tengir and the developments likely to occur during the lifetime of the analysis, differences in prices between different areas and the advantage of basing market share figures on turnover rather than quantity.

Finally, Síminn commented that it was clear, when looking at the new draft from the EU Commission on market definitions on the electronic communication markets, that as there already existed significant differences in market share between areas, in the current situation here, the markets should be defined locally. The same would apply if an area had the same number of competitors, but different parties, as odds are that these would be separate markets, cf. Tengir's area and GR's area. By Síminn's estimate, there is every indication that Markets 3a and 3b must be defined geographically and it seemed that the PTA's additional consultation, if anything, strengthened Síminn's position on this.

The PTA states that the difference in market share by region and the number of competitors were among the factors to be considered. These were factors relating to the structure of the market. In addition to such factors, the conduct of the market participants needs to be taken into account, such as pricing and marketing by areas. After a detailed analysis of all these numerous factors the PTA concluded that there was not cause for dividing the country into geographical markets, and that it sufficed to stipulate different requirements by areas. The PTA furthermore does not agree with Síminn that the PTA's additional consultation had supported this position taken by Síminn.

Síminn stated that there was no doubt that the legal requirements for intervention in market 3a and 3b in the capital area did not exist, and therefore there was no justification for imposing requirements on Síminn, like the PTA intended to do.

GR had 100% roll-out in the capital area, i.e., a fibre-optics system that reached each and every household. Míla did not. Based on what the PTA's analysis indicated, GR had about or over 50% share in the market for local loops that were used for broadband service (market 3a). The same applied for bitstream access (market 3b). That being considered, Síminn had less than 40% share in the market, and therefore it was wrongly stated in the PTA's additional analysis that Síminn had been expanding its market share in the area. This statement was incorrect, and it was clear that the PTA's position was not based on data. The year 2020 was drawing to a close and the PTA needed to ensure that it based its findings on the correct data. It had been established, and confirmed by the PTA, that Síminn's share in the capital area was under 40%, and this had not changed with regard to the figures on which the PTA had based its assessment. If predictions were to be made about the development over the next 2-3 years, based on the developments of the last 2-3 years, it was clear that Síminn's share would not increase in the capital area, but rather decrease.

The PTA's position

The PTA refers to its answers to Síminn's comparable comment in Appendix B, and to the updated analysis (Appendix A). As stated therein, supported by extensive arguments from the PTA, there is no cause for separating the relevant wholesale markets geographically in this country, irrespective of whether this concerns the capital area or other regions. When the entire country is a single geographical market, it will always be possible to find certain areas or

municipalities where the market shares of Míla and Síminn are below the national average and others that are over it. Therefore, there is legal justification for intervening in the relevant markets all over the country.

To nevertheless respond to Síminn's comment regarding the situation in the capital area, Síminn is correct to state that GR's market share in the capital area is over 50% on market 3b, compared to [...] % at the end of 2020, and it was [...] % in the company's entire area of operation. On the other hand, in market 3a GR's corresponding shares were [...] % of the number of leased local loops in the capital area and [...] % on GR's entire area of operation.

Síminn also maintains that the company has less than 40% market share in the capital area. The company's market share was [...] % in this area at the end of 2020 and [...] % in GR's entire area of operation. It is therefore correct that Síminn has just under 40% share in these areas. Síminn's market share in the capital area has changed little in the past few years, it was just over 40% at the end of 2017 or more precisely [...] %, then it dropped slightly below 40% at the end of 2018, that is [...] %, and was [...] % at the end of 2020.

Síminn also maintains that Síminn's market share will decrease during the lifetime of the analysis in the capital area. Considering the developments in the past few years, and the recent agreement between Síminn and GR regarding Síminn's access to GR's fibre-optics network, it is the PTA's assessment that in all likelihood Síminn's market share will on the contrary increase in the area for the remainder of the lifetime, and the aforesaid agreement was implemented on 25 August 2021.

Even further reference is made to the earlier response in Appendix B, where the reasons are given why the capital area or GR's area of operations cannot be the basis for a specific geographical market.

Síminn pointed out that the following claim by the PTA in the analysis was factually incorrect:

“However, the PTA did not consider the competitive pressure to be sufficient, as only one competitor was present in each area and the competitive conditions were not "significantly" different from one area to another, as Síminn had very recently been adding to its market share in these areas...”

The PTA's above-mentioned premise for the imposition of obligations was incorrect. Síminn's share in the capital area had not been increasing. At least there was nothing to indicate that Síminn's share was exceeding 40%, and therefore there was no likelihood of Síminn's share approaching 50%.

No data existed that supported this statement that Síminn had been increasing its market share in the capital area, as on the contrary there had been no change in the development of the number of Síminn's customers in the capital area, and there were no indications that Síminn's share would exceed 40% in the capital area during the lifetime of the PTA's analysis. Since the beginning of 2020, the number of customers buying Síminn's internet service had decreased while the market had been expanding.

The imposition of requirements in the capital area, whatever form they might take, was simply unlawful. Even though Míla might be the only participant in a given area of the country providing broadband service on local loops, there was nothing to justify imposing requirements on Síminn nation-wide for this reason, and it was evident that if the PTA implemented its plans

such a decision would constitute a serious infraction of the principle of proportionality in accordance with the Administrative Procedures Act.

In light of the fact that Síminn's market share was under 40% in the relevant area, it was clear that Síminn's concerns were legitimate and under no circumstances could it be justified to impose requirements on Síminn in the aforesaid area.

Síminn could not see the logic behind the PTA's ideology whereby requirements were to be imposed on Míla or Síminn, but not on GR, which had now been established to have enjoyed government support according to the findings of the EFTA Surveillance Authority, and according to what the PTA itself had been forced to admit. Síminn could not see that the PTA had worked according to its forecast regarding the developments on the market without restrictions being imposed in the relevant area. Until this was implemented, the PTA could not impose any restrictions and it was unthinkable that onerous restriction would be imposed based on conjecture and arbitrary decisions rather than investigation.

The PTA's position

The PTA refers to the latest answer given above. This is a very similar comment, and it was answered and has in fact been answered in Appendix B.

The PTA has also responded in Appendix B regarding why the Authority does not impose restrictions on GR, which is simply because that company has not been designated a company with significant market power. Therein the PTA has also responded to Síminn's comments regarding the alleged, unlawful government support granted to GR. The PTA also categorically denies that the imposition of restrictions is based on conjecture and arbitrary decisions rather than investigation. On the contrary, the PTA has investigated the aforesaid markets and the related retail market very thoroughly. It may be pointed out that this analysis is by far the most extensive which the PTA has ever performed.

Síminn stated that Tengir was the company with the largest share in the Northeastern Region of Iceland, and therefore it could not be fully comprehended what the PTA thought it was achieving by imposing requirements on Míla and not Tengir. If there was no cause to impose restrictions on Tengir, 40% of which was owned by the town of Akureyri and therefore receiving government funding, there was no cause to impose restrictions on other parties with smaller shares and nearly exclusively using copper systems.

For instance, it served no purpose to impose requirements on Míla's copper connections when fibre-optic cable from Tengir was available in the same location. Basically, an onerous requirement was being imposed on property that was not being used and was not likely to be used after the consumer had switched to Tengir's system.

The PTA should follow the rules that presumably should be used for reference in the forecasting model for the lifetime of the analysis, which according to the PTA was 2-3 years. Thus, the PTA needed to answer the question about what developments were likely to occur with regard to Tengir's share in the next 2-3 years, and assess the situation based on that forecast. This had not been done. Therefore, the case had not been fully investigated.

Síminn considered that no legal authority existed for intervening in Síminn's activities in the Northeastern Region. The situation in the area was such that Tengir was the party with the most

connections in the area in market 3a. Any telecommunications company could connect to Tengir and offer telecommunications services to consumers and companies in the area.

In Síminn's assessment, the best possible outcome would be that imposing requirements on Míla where Tengir had already installed fibre-optics would serve no purpose, but most likely such requirements would cause an imbalance in competition, harm to consumers and slow down investment.

It was therefore difficult to see what goals the PTA was aiming at by imposing a requirement on Míla's copper connections and not Tengir's fibre-optic connections. If the PTA's theory regarding substitutability was correct, it was evident that the competitive restraint of copper connections was at least very weak. In this regard it sufficed to consider the development of Tengir's connections compared to Míla's copper connections.

Under these conditions it was important that no restrictive requirements applied to the service or product that provided very weak restraint, if any. In Síminn's assessment, the best conditions for telecommunications companies that bought service from Míla or Tengir would be if they could make use of competition between the parties, rather than one party being subjected to strict requirements, because then the bargaining position of those buying the service from the other party would be even worse. Síminn considered it desirable to have no requirements, although the PTA could subsequently, if the market analysis took place at the correct time, do a fast analysis of the market if conditions changed, for instance in the event of overpricing.

The PTA's position

The PTA refers to its previous answers herein and in Appendix B regarding the aforesaid comments from Síminn with regard to Tengir and the position in that company's area of operations. Síminn repeatedly reiterates the same comments herein and regarding the preliminary draft. These have already been adequately addressed.

The PTA reiterates that Tengir's area of operations is not a designated separate geographical market any more than any other areas in this country. In addition, it is not correct that Tengir has the largest share in the relevant markets in the company's area of operations. At the end of 2020 Tengir's market share was less than half, i.e. [...] % in market 3a, and considerably smaller at [...] % in market 3b in the company's area of operations. Síminn has by far the largest market share in internet service retailing in Tengir's area of operations, nearly [...] %. This is not surprising in light of the fact that Míla leases a large part of Tengir's local loops and uses them to provide its own bitstream. Tengir therefore relies heavily on Síminn Group's buyer power.

Síminn stated that there were three participants operating in Reykjanesbær, which in Síminn's assessment meant that it was a separate market. No discussion about Reykjanesbær could be found, nor about the fact that three participants were selling fibre-optic connections to their own system in the area i.e., Kapalvæðing, Míla and GR. As there were three participants conducting operations, generally speaking there existed no criteria for imposing restrictions. Síminn encouraged the PTA to investigate the relevant area more closely, and to cancel all restrictions that applied to the aforesaid market.

The PTA's position

The PTA refers to its previous answer to Síminn's similar comment in Appendix B. The PTA has also added a discussion about the situation in Reykjanesbær in the updated market analysis (Appendix A). The conclusion was that the aforesaid cable system of Kapalvæðing or that

company's retail activities did not constitute sufficient restriction for Síminn Group for it to be justified to separate that municipality as a distinct geographical market, in addition to which it may be stated that this municipality is a small one in the overall context.

Síminn ended by reiterating its previous views and considered that as there were two parties or more offering access to fibre-optics there existed no criteria for intervening with regard to the party with the minority of connections. Copper connections were not substitutes for fibre-optics, and at present there existed no data that demonstrated that they were, based on the state of the service today. Síminn furthermore stressed that it was entirely inappropriate to impose a restriction on Síminn without first carrying out an analysis of the relevant restriction.

It was no less important to avoid imposing a restriction on parties regarding rights and obligations without any elaboration of what these obligations entailed. The PTA would therefore need to issue a new consultation document, wherein the development of the market would be taken into account based on the numbers that had been submitted in support of the preliminary draft and the requirements which the institution intended to impose on Síminn would be clearly indicated.

The PTA's position

The PTA has earlier in this document, and in Appendix B, responded to all the aforesaid comments from Síminn, and refers to said response. The PTA reiterates that the investigation of this case had been adequate and thorough, and that there is no need to issue a new consultation document.

Nova referred to paragraph 102 in the additional consultation document, where it is stated that the PTA's findings in paragraphs 593 and 794 in the preliminary draft had been to the effect that there was no cause for defining separate geographical markets in this country. The competitive conditions between areas with little or no competition on one hand and areas with a higher level of competition on the other hand were not sufficiently different to justify this. Though there is a certain difference in market structure between the areas in question, among other things with regards to deployment of the fibre-optic networks and market share, this difference is not reflected in behaviour of the Síminn Group or its competitors between these areas and is thus not passed on to consumers in the form of variations in price, quality, service offer and other parameters that should affect consumers if competitive conditions varied significantly between areas. The competitive pressure faced by Mila would thus not be sufficiently different between these two areas in the relevant markets for it to be considered significant.

Nova referred to its comment to paragraph 70 in Section 4 regarding the ERT above and considered it also to be applicable in this case. Nova believed that there were other reasons for the lower price for copper local loops not being passed on to consumers, namely that a considerable number of customers still used these connections, both in areas where other options were available and where they were not. Consumers considered it natural that the price for copper connections would then decrease in all areas, irrespective of whether other options were available in them or not. The telecommunications companies (mostly Síminn and Vodafone) had not lowered prices and synced them to the speed of the relevant connections, for the simple reason that there was no competition for this price.

The PTA's position

The PTA considers that the aforesaid comment from Nova supports the findings of the PTA's market analysis.

Nova commented on Paragraph 119 in the additional consultation document, where it was stated that as there are generally only two active telecommunications networks (copper or fibre-optic) in Iceland, including Míla's network, in areas which had any competition at all, the PTA did not intend to change the criteria that Míla's competitors would need to have approximately 75% of that coverage. As is stated in the initial estimate, it is the estimate of BEREC and the majority of the PTA's sister institutions in Europe, that at least three networks would be required to ensure competition.

Nova said that based on the aforesaid paragraph in the additional consultation document and the assessment of the PTA's sister institutions, it could be said that there were almost no areas in Iceland where effective competition prevailed and therefore it was very important that rules and requirements were effective in the relevant wholesale markets.

The PTA's position

Nova's aforesaid comment supports the PTA's findings in this market analysis.

Nova commented on Paragraph 120 in the additional consultation document, where it was stated that it varied in Europe whether the criteria on market share of parties with considerable market power was set at 40% or 50% on a retail level. The principle in competition and telecommunication regulations was that if a party had a market share that was 50% or greater, there would have to be a great deal of mitigating factors for one to be able to conclude that this party was not in a market dominant position. In light of the above, as well as comments submitted following the consultation on the initial estimate and data obtained by the PTA following that, and with regards to proportionality, the PTA intended to waive the requirement that Síminn must be under 40% in market share in retail and instead use 50% for reference.

Nova said that it was the company's assessment that a state of oligopoly prevailed on the market in question and therefore the PTA was doing too much to relax requirements that could lead to increased competition.

The PTA's position

The PTA has in Section 4 above responded to Nova's comparable comment, and hereby refers to that response.

Nova submitted a comment regarding paragraph 125 in the additional consultation document, where it was stated that the PTA intended to annually update the list of municipalities that met the criteria for the definition of an area with a higher level of competition and thereby qualified for less stringent requirements.

Nova stated that it would be suitable to carry out such updates more frequently, for example every 6 months.

The PTA's position

The PTA does not consider there to be a pressing need for updating the list more frequently than once a year. More frequent alterations with regard to division into areas are not likely to support predictability and may be excessively onerous.

7 Other comments

7.1 General comments in the additional consultation

In this Section the PTA will respond to those comments submitted by market participants during the additional consultation that do not directly concern the specific items discussed in the additional consultation document, which are mostly comments from Síminn and GR.

7.2 The PTA's position regarding general comments submitted during the additional consultation

Síminn stated that the company's comments submitted during the additional consultation were an addition to Síminn's previous comments and reiterated the statement that the case had not been adequately investigated, as the appropriate data had not been obtained and the PTA had also neglected to perform the obligatory market analysis, i.e., an analysis of the likely development of the market during the lifetime of the analysis, based on the proper data.

With regard to the conclusions in the additional consultation document, as in the preliminary draft, the PTA relied overly much on speculation, without having actual data to base the conclusions on. As this was an onerous decision, the authority was subject to even stricter demands with regard to its research obligation. Síminn reiterated its previous comments regarding that the institution should not impose requirements on companies without conducting investigations and giving satisfactory arguments in support of the objective with the measures taken and the manner in which the institution intended to work towards that objective in accordance with the provisions of the Administrative Procedures Act.

The PTA's position

In Appendix B, and earlier in this document, the PTA has responded to Síminn's frequently repeated comments regarding the lack of investigation of this case and refers to those responses.

Síminn submitted a comment regarding the PTA's discussion of Síminn's Premium television package. In the PTA's additional consultation document the following was incorrectly stated by the institution:

“Nevertheless, that television material, i.e., Sjóntvarp Símans Premium, will be accessible on GR's network in 2021, but, under the current circumstances, only for those consumers that do retail business with Síminn.”

Materially, the PTA's assertion was not only incorrect, but Síminn found it very strange in light of the fact that Síminn had on many occasions repeatedly declared to the PTA that the service was accessible over all telecommunications systems that offered connection to the Internet by whatever name they were called, wired networks and mobile networks. Also, the telecommunications appellate committee had recently annulled the PTA's decision of 2019 wherein it was stated that it was beyond all doubt that Síminn had offered the Premium television package over GR's system, and therefore the PTA should be aware of that this content service was offered on GR's system.

Síminn was naturally worried when factors such as this had an effect on the PTA's decision making. The PTA would have to explain how this fact had escaped the authorities' attention, or if the institution was speaking against its better knowledge.

Also, Síminn had repeatedly informed PTA staff that Síminn's television service was also accessible over GR's system, and therefore the authority should be aware of the fact that Síminn's television content was offered over all telecommunication systems in the same manner. It would be very unfortunate if the PTA incorrectly maintained the opposite. The only alteration to the agreement between Síminn and GR was that Síminn could offer internet service over GR's system, which would not have been possible except with the agreement.

Síminn also pointed out that it was only possible to purchase Netflix from Netflix in Iceland, Disney + from Disney, Viaplay from Viaplay, and that a multitude of similar cases could also be cited. It was therefore not unnatural that the same should apply to Síminn's Premium television package. Therefore, the significance of Síminn's Premium television package being exclusively available for purchase from Síminn was not clear.

The PTA's position

The PTA's responses to Síminn's comments regarding comparable issues in Appendix B include a discussion of the developments that had taken place with regard to Síminn's television case since the preliminary draft was submitted for consultation at the end of April 2020, among other things the ruling of the District Court of Reykjavík of 1 July 2020, whereby the PTA's decision no. 10/2018, that Síminn had violated the provision of paragraph 5 of Article 45 of the Electronic Communications Act, was upheld, albeit based on altered criteria. Also included was a description of the aforesaid decision of the appellate committee, to which Síminn refers. It is stated in these responses that the PTA will update the text of the analysis with regard to matters involving Síminn's television case. See the relevant sections.

The PTA agrees that the aforesaid text in the additional consultation document is not precise in all respects. What the PTA means is that the great majority of Síminn's customers purchase the aforesaid television content service through the bundle named the household package, and that bundle has attracted the customers of other service providers. Included is Síminn's IPTV service. Síminn correctly states that since August of 2018 the company has offered the aforesaid television content service as an OTT solution, i.e., "Síminn's television service independent of network". Still, this service has been subject to the conditions that a specific decoder must be leased from Síminn to enable viewing of the aforesaid television service, including Síminn's Premium television package. For a long time, there was little use of this service independent of network. According to the latest information from Síminn, as of the end of 2020, the number of Síminn's customers using that solution had reached [...]. The PTA considers that this is not a large proportion compared with the number of Síminn's customers who use Síminn's television content service on Síminn's IPTV system, who were 56,824 at the end of 2020.

Síminn's response to the PTA's inquiry, dated 9 February 2021, also includes the statement that the service independent of network today was the same as the IPTV service, i.e., a basic subscription with the option of adding other subscriptions, such as Síminn's Premium television package, Síminn World (foreign rebroadcasting), movies for rent, time-shifting, Vodafone's subscriptions etc. In addition to this, Síminn had participated in the testing of the AndroidTV app in recent months and, at the beginning of February 2021, an experimental app was included for AppleTV, currently being tested. At the present moment, it is necessary to pair the apps with the decoder, which can be either IPTV or independent of network. Therefore, it did not

matter anymore what system the customer was using. The next step in the development of the television content service, which had been taking place over the last 1-2 years, was to design the service in such a way that it was not necessary to pair the apps with Síminn's decoder. This is expected to be ready in the spring of 2021. Thus, the customers who were using GR's system would be able to purchase "all" of Síminn's television content service in the same manner as with Míla's system, or any other system. This also applied to the systems of Tengir, Snerpa and Austurljós, irrespective of whether Síminn had an agreement regarding the relevant system or access to that system.

In the PTA's assessment the aforesaid innovation with regard to Síminn's aforesaid agreement with GR is likely to significantly reduce the harmful effects which the arrangement of Síminn's television content service, which has been in place since October 2015, will have on the telecommunications market. This problem was partially resolved with the aforesaid OTT solution provided by Síminn in August of 2018, and with Síminn's wholesale agreements with other telecommunications companies regarding the English Football League broadcasts from the summer of 2019 and has been resolved to an even further degree at present. The PTA took the two last-mentioned factors into account when the institution proposed in the additional consultation document to abandon the plan to impose cost-analysis requirements on Míla's fibre-optics and suggested a relaxation of the criteria for the selection of areas where less stringent requirements shall apply. This most recent development, as described by Síminn earlier, strengthens the PTA's resolve this was the appropriate course of action. The aforesaid development still does not alter the fact that Síminn's household package, which includes Síminn's Premium television package and the English Football League broadcasts, is a very popular bundle which other service providers seem to find it hard to compete with.

In conclusion, Síminn pointed out that that it was only possible to purchase Netflix from Netflix in Iceland, Disney+ from Disney, Viaplay from Viaplay, and that a multitude of similar cases could also be cited. It was therefore not unnatural that the same should apply to Síminn's Premium television package. Therefore, the significance of Síminn's Premium television package being exclusively available for purchase from Síminn was not clear.

The PTA points out that different things are being treated as the same when one video service provider is owned by a telecommunications company that is in a dominant position on the market and some, such as Netflix and others, do not operate their own distribution network.

Síminn stated that as the PTA did not consider there to be cause for intervening with regard to GR's operations, but intended to impose requirements on Míla and Síminn, Síminn considered that it was worth referring back to certain items regarding the arguments presented by the PTA concerning GR in connection with Síminn's issues. In the case that became decision no. 10/2018, the PTA had maintained that Síminn's demands for access to GR's system had not been objective due to the fact that GR was built up on market-based grounds. GR had stated the following regarding its own operations:

"GR was run on market-based grounds in accordance with the PTA's decision regarding the financial separation of RE's telecommunications activities."

Clearly this statement from GR was incorrect, as GR had during that time not been run in accordance with the PTA's decision regarding the financial separation of RE's telecommunications activities. The PTA had also stated with regard to the same case:

"GR's network is founded and financed on market-based grounds, and therefore Síminn and GR's discussions must be considered as being exclusively based on commercial grounds achieved through free negotiation."

As the PTA had maintained that GR was financed on market-based grounds, Síminn and GR's negotiations had to be considered in a certain light. It was clear that these grounds which the PTA had assumed were not correct, and in light of the fact that the PTA had been investigating GR at the same time, the PTA should have known better than to maintain this. The PTA had furthermore stated:

"The PTA's monitoring of GR has confirmed the normal progress of the company, including the required rate of return, leverage etc."

This decision had been made available in July of 2018. It had furthermore been stated in the PTA's decision no. 3/2019 that:

"In accordance with the above, the PTA concluded that the financial separation between OR and GR was consistent with the provisions of Article 36 of the Electronic Communications Act, except with regard to the short-term loans granted to GR in connection with the cash pooling of OR in 2017. The PTA also made a comment on the conditions in loan agreements with credit institutions regarding OR's ownership of GR. The PTA therefore considered that improvements were needed in the implementation of the financial separation of RE and GR."

The aforesaid demonstrated that it was important that the PTA did not make assumptions regarding GR's situation but should rather investigate the company's situation. In Síminn's assessment, the PTA should at its own initiative cancel decision no. 10/2018, as the assumption regarding GR being run on market-based grounds was unsound, and consequently the same applied to the PTA's following assessment of GR and Síminn's negotiations based on that same assumption. For example, the EFTA Surveillance Authority's decision dated 5 December 2019 could be cited:

"Based on the above considerations, it is the Authority's preliminary view that GR has obtained an advantage within the meaning of Article 61(1) of the EEA Agreement, which it could not have obtained under normal market conditions, by: (i) not paying market interest on the advantage it obtained through a temporary suspension of interest payments, (ii) receiving funds indirectly from OR for the roll-out of a fibre optic cable network in Ölfus Municipality, (iii) receiving short-term lending from OR, and (iv) through the inclusion of a condition in GR's loan agreements with private lenders on OR's continued majority ownership in GR."

The EFTA Surveillance Authority had thus found four reasons why GR was not run on market-based grounds in accordance with the provisions of the EEA Agreement. It was clear that GR was not only financed with public funds, but the company had also received government support during its formation, which had resulted in the company having a share in connections and a market share of 50% in its area of operations. Síminn encouraged the PTA to assess the likely developments in the bitstream market, in light of the fact that GR did not offer access to local loops unless bitstream service was purchased concomitantly. It should also be possible to analyse the areas where Míla was unlikely to install fibre-optic cable in the capital area and extrapolate the development in these areas over the next 2-3 years. Thereby was possible to see that GR would continue to expand, and naturally it had to be considered whether the requirements were directed towards the proper participant.

The PTA's position

Reference is made to previous responses regarding GR's share in Appendix B and the updated Appendix A, as this concerns repeated comments in this regard.

The PTA considers this reiteration on Síminn's part of the statements regarding GR receiving unlawful government support and the way in which it is connected with the grounds for the so-called television case, cf. the PTA's decision no. 10/2018, as well as encouraging the PTA to cancel that decision, to be irrelevant to the case here submitted for resolution, in addition to which the statements mostly do not hold up to scrutiny.

For a good many years, the PTA has regularly examined the implementation of the financial separation of GR within the RE group. The principal conclusion has been that said implementation is in accordance with the law, in decision no. 3/2019 among others, as clearly stated in Síminn's quote. On the other hand, it was the conclusion of the PTA that certain, isolated deviations had occurred that needed to be rectified. The PTA has also confirmed such deviations in the institution's previous decisions regarding monitoring of the implementation of the financial separation of GR within the RE group.

At present, the EFTA Surveillance Authority has reached the provisional conclusion that the deviations listed in Síminn's quote may involve unlawful government support. This is now for further examination at the EFTA Surveillance Authority. If it is found that these isolated deviations included unlawful government support, it has not been established what unlawful financial gain resulted for GR. The PTA rejects that the EFTA Surveillance Authority's final conclusion in this regard will have an effect on the market analysis here under discussion.

Síminn was of the opinion that much was lacking in the PTA's intended decision for it to meet the requirements of Article 12 of the Administrative Procedures Act with regard to proportionality. The PTA's intended decision entailed among other things that an access requirement would be imposed on Míla, along with a tariff control requirement with regard to copper connections, and a requirement for monitoring of Síminn among other items. In fact, the principal requirements would apply to the entire country, even though they were clearly not needed in all areas of the country.

Nevertheless, it was stated that the PTA had analysed a number of municipalities where Síminn's market share was less than 50%, and a company other than Míla had more than 75% coverage of the access network in the relevant municipality. This criterion applied to 70% of the country's population. The PTA's preliminary draft included information about a large number of regions where Míla's market share was smaller than that of its closest competitor. Despite this, the PTA considered it appropriate to maintain the requirements in the aforesaid regions but not to impose requirements on the company with the largest market share. Clearly it was not consistent with the principle of proportionality in the Administrative Procedures Act to impose requirements in the aforesaid regions. A more normal course of action would be to allow the market to develop naturally, and there were many indications that developments in the market had been positive for consumers once restrictions had been removed.

If any problems with regard to competition existed in other regions, these problems would need to be analysed and responded to in the relevant locations, without imposing requirements, for example in Reykjavík, that applied to situations in completely different places. Such action went beyond what was necessary in order to achieve a legitimate objective. It was actually

Síminn's assessment that the requirements imposed by the PTA and the statements regarding requirements likely to be imposed were the actual problems when it came to competition.

According to Article 12 of the Administrative Procedures Act, a public authority was only to reach an adverse decision when the legitimate objective sought after could not be attained by other, less stringent means. Care should then be taken not to go further than necessary. This provision was particularly important when it came to discretionary decisions.

The PTA's position

The PTA does not agree with Síminn regarding the requirements which the PTA intends to impose on Síminn Group, as described in the additional consultation document, being excessive in light of the structure of the market, the competition status in this country in other respects, and the analysed competition problems. The PTA decided not to require cost-analyzed prices for Míla's fibre-optics and instead stipulate a less stringent requirement whereby the group shall pass ERT tests. There would also be some relaxation of the conditions for municipalities being considered areas with more competition and thereby less stringent requirements should apply to Míla there.

Síminn yet again submits a comment regarding the need for separate geographical markets in this country for the relevant markets. The PTA has already responded to such comments from Síminn, in Appendix B and earlier in this document, and refers to these responses and Sections 6 and 7 in the updated preliminary draft (Appendix A).

Síminn stated that as there was a lack of definition of the objective with the PTA's decision, it was difficult to analyze what actions were likely to achieve that objective. Still, it was clear that the requirements imposed on Síminn Group, where units within the group either had a market share lower than 40% or a market share lower than that of their competitors, were not consistent with the principal of proportionality and also clearly contrary to the consumers' interests.

Síminn therefore encouraged the PTA to rectify the analysis, define objectives, and ensure that requirements were not imposed on companies when their market shares did not justify an intervention based on competition law. It was also difficult to see if the requirements imposed in other regions would yield any results in light of the fact that there was no defined objective. If the objective was to promote more roll-out of fibre-optics, then the PTA's market analysis and ill-advised requirements based on it would in fact detract from the incentives to do so.

The PTA would have to respond by taking a more definite stand regarding certain requirements that would not be considered, as it was difficult to see how enormous investments could be made over a period of decades if the PTA left the issue open and then later imposed requirements that nullified the profitability of those investments.

The PTA's position

The PTA does not agree with Síminn that the objective with the aforesaid market analysis is lacking. The objective is twofold, to strengthen competition in the relevant wholesale markets and to promote continued roll-out of fibre-optics, for the benefit of the consumers. This is stated repeatedly in the analysis. The intent with the PTA's requirements is to work towards those objectives and to seek a certain balance between them. The PTA has previously responded to Síminn's much-repeated comments regarding individual regions and refers to said responses.

Síminn states that the PTA needs to be more definite regarding certain requirements being off the table in perpetuity. In that regard, Síminn is probably referring to the requirement for cost-analyzed prices for Míla's fibre-optics. As stated in the additional consultation document, the PTA considered it proper under the present circumstances, for reasons already given, to abandon its plan to impose such a requirement on Míla, and instead stipulate a requirement whereby Síminn Group shall pass ERT test. Naturally the PTA cannot declare once and for all that such a requirement will never be considered in the future. This might happen, for instance if competitive conditions and competition problems take a turn for the worse and/or if Síminn Group fails the aforesaid ERT test and does not redress the relevant issues in accordance with the PTA's decision in that regard. It is also proper to point out that when a requirement is imposed regarding the price for a certain service being based on cost, it is ensured that the cost of providing the service in an efficient manner will be retrieved along with an appropriate return on the investment.

Síminn reiterated that acts of administration had to be clear and decisive. This was also especially important when it came to assessment-based decisions regarding requirements and the elaboration thereof. The findings in a case, and consequently also the rights and obligations, should be worded in a simple and succinct manner, cf. for example page 234 in Páll Hreinsson's publication "Administrative Procedures Act". The PTA's intended decision did not satisfy these conditions.

The PTA's position

The PTA considers the aforesaid market analysis to be clear and decisive, despite being very extensive and considerably complex. The requirement that is not completely elaborated in the analysis, i.e., the ERT requirement, is nevertheless sufficiently clear for market participants, including Síminn Group, to be able to understand what is intended with it. This requirement will be elaborated at a later stage in a specific decision, following consultation with interested parties in this country, the EFTA Surveillance Authority and other telecommunications regulatory authorities in the EEA Area. The PTA did not think it proper to delay the analysis any further than it had been already, by including a more precise elaboration of said requirement.

Síminn stated that in order for onerous decisions to be lawful they had to be made for the purpose of attaining legitimate objectives. The PTA's proposals did not include any such objective.

The PTA had maintained that effective competition could not exist unless at least three companies that operated their own networks were competing in the same location. This was a new viewpoint, and no arguments were submitted in support of it. Effective competition was not measured by the number of access networks. Increasing the number of competitors could not be an objective in and of itself, as it was not evident that more competitors would result in a better level of service or better prices. For example, there were many places in Europe where parallel fibre-optic networks were not installed and instead participants co-operated in the installing of fibre-optics or in the utilization of infrastructures already in place. If there were too many competitors in light of the relevant market conditions, competition could lead to inefficiency and thereby would have to be considered ineffective.

Competition resulted in many factors. These could include a better level of service, although in some cases it would be provided at less advantageous terms, as the utilization of each system decreased. A lack of pooling of resources could result in less quality at worse terms. Extensive

and fierce competition could also result in a lower quality of service at less advantageous terms. As the relevant market was homogeneous in nature, and there was limited leeway when it came to separation, there was a risk that the latter result would occur. Therefore, it was extremely important that the actual objective which the PTA was aiming for was clearly defined. A maximum number of competitors or parallel networks could not be an objective in itself, but rather the goal should be to improve the benefit for consumers and achieve a state of competition that resulted in better products or services for consumers at better terms.

Síminn encouraged the PTA to submit a clearly defined, legitimate objective which the institution aimed to achieve with its decision, so that the institution could at a later stage measure if the decision had contributed to the attainment of this objective.

In Síminn's assessment the PTA's objective should be consistent with Parliament's objective to make all endeavors to promote increased roll-out of fibre-optics where it is needed and more co-operation that encouraged more efficient and more practical telecommunications for the benefit of consumers.

The PTA's position

The PTA refers to the response given earlier regarding the objective of the market analysis.

The PTA does not state in the analysis that effective competition cannot exist with only two networks in operation. However, it is the PTA's assessment that this would be more likely to occur if there were more than two networks. It is furthermore the PTA's assessment that in light of the structure of the market, and the competitive conditions in other regards, there is no effective competition in this country on the relevant wholesale markets nor the related retail market. Nowhere does the PTA state that the number of networks is an objective in itself. One principal goal with the analysis is to strengthen competition in markets where effective competition does not prevail. Experience from various markets has demonstrated that it is more likely that this goal is reached if more than one and more than two telecommunications networks are in place. The number of service providers competing on the available networks is also important.

Síminn maintains that the PTA's objectives should be to promote increased roll-out of fibre-optics. The PTA agrees that this is one of the primary objectives with the analysis. However, it is not acceptable if this is achieved at the expense of competition. By abandoning the plan to impose a requirement whereby Míla shall have a cost-based list of tariffs for the company's fibre-optics, the PTA considers that it is taking into account the comments regarding such a requirement being likely to impede further roll-out of Míla's fibre-optics. By imposing the ERT requirement instead, the PTA considers that it is ensuring that competition will not be impaired by such a concession. The PTA also elaborates the requirement regarding access to Míla's tubes and utilities routes in more detail in this analysis than in the currently applicable analysis, which should also lead to the continued roll-out of fibre-optic networks, especially in rural areas where no fibre-optic network is available today. Co-operative efforts to roll-out fibre-optics have increased in recent years, and the PTA does not see that this market analysis should cause such co-operative efforts to diminish, but rather the contrary.

Síminn stated that in the PTA's preliminary draft it was not adequately specified what problem in connection with competition the PTA intended to resolve with its market analysis, especially with regard to the areas in which GR and Tengir were operating. At present, the authority was

justifying the requirements which the authority had planned in the additional consultation document.

For example, Síminn could not see how it was justified that the PTA imposed a requirement on Síminn in locations where Síminn was not even using local loops owned by Míla. In light of the fact that Síminn's market share was under 40% in the capital area, which constituted about 2/3 of the entire population of the country and used Tengir's local loops as a general rule in the Northeast Region, it was evident that the authority to impose requirements on Síminn did not exist, as this was in no manner supported with arguments in the PTA's consultation.

The PTA's position

There is a detailed discussion of the competition problems, potential and actual, which the PTA has analyzed in Sections 10.2 and 11.2 in the updated preliminary draft (Appendix A). See the aforesaid sections. The requirements are then intended to remedy the aforesaid competition problems.

As aforesaid, the findings from the PTA's detailed analysis are that Síminn Group has significant market power in the relevant market. The intent with the ERT requirement is among other things to ensure that there is not an abnormally small difference between wholesale and retail prices. A more detailed elaboration of this requirement will, as aforesaid, be determined with a special decision where Síminn and other market participants will be given an opportunity to present their views.

The PTA has previously responded to Síminn's much-repeated comments regarding individual regions and refers to said responses.

Síminn pointed out that if the PTA wanted to continue to use the definition that copper connections and fibre-optic connections were parts of the same market, it was clear that mobile network connections were so as well. At least this was the PTA's opinion:

"This is a total revolution. The first step is actually just what I mentioned earlier, i.e. more data volume and more speed, which will be of use at least at first for example for rural areas with high population density, where fibre-optics have not been installed."¹⁷

If mobile network service would replace VDSL connections, not by fibre-optics connections for example, it was evident that copper connections and mobile network connections could form a separate market, and fibre-optics constituted a separate market. VDSL connections had been installed in nearly all high population density areas and where substitutability service was being used the PTA would have to answer the question why the government was emphasising fibre-optic installation, as stated in the PTA's additional consultation document.

The PTA's position

The PTA refers to its previous answer to Síminn's comment in Appendix B. The words that Síminn quotes in the above comment can in no way be interpreted as confirmation of substitutability. The PTA furthermore refers to Sections 3 and 4 in the updated market analysis (Appendix A), regarding the substitutability assessment for fixed networks and mobile networks. The PTA's conclusion is that such substitutability is not available in this country and will not be during the lifetime of the analysis in the authorities' assessment.

¹⁷ <https://www.visir.is/g/20201997282d>

GR stated in its comments to the preliminary draft that Míla had maintained that the company had not proceeded very far with its roll-out of fibre-optics networks. GR disagreed with this. In the Greater Reykjavík Area, the number of Míla's connections had increased rapidly, and Míla was the only company with fibre-optics that reached to nearly all areas of the country. It had been Míla's stated policy to achieve roll-out of the company's fibre-optics to all households in the capital area. Míla was also in a very strong position in the principal, largest urban high population density areas in the country. During the last 3-5 years, Míla had devoted much effort and funds to build up the company's fibre-optic network. GR was of the opinion that Míla would during the time of validity of the planned market analysis (within 3-4 years) have a fibre-optic network that would reach most spaces in Iceland.

In light of the PTA's plans, the situation could arise in competitive markets that the fibre-optic network of Míla, which has been defined as a telecommunications company with significant market power in accordance with Article 18 of the Electronic Communications Act, would be subject to unsatisfactory requirements that were intended to equalize the competitive conditions on the telecommunications market. Míla's vertical integration with Síminn would also increase the company's strength even further. There were also other factors, which GR had pointed out to the PTA in its response dated 20 October 2020 to the PTA's inquiries, that indicated that Míla was achieving an even stronger market position and referred to said response.

The PTA's position

The PTA agrees that Míla has achieved rapid and extensive roll-out of fibre-optics in the last 5 years or so, mostly in GR's area of operation. In spite of this, Míla has yet to cover a considerable amount of ground in order to achieve the same roll-out as GR has in that area, i.e., the combined roll-out of GR, Tengir, Snerpa and Austurljós. Based on the company's roll-out plans, which the PTA obtained in the autumn of 2020, it is the assessment of the authority that clearly the fibre-optics networks of Míla and those of the company's competitors will become quite similar in coverage during the lifetime of the analysis. However, in the assessment of the PTA Míla will not complete its installation of fibre-optics for the entire country during the lifetime of the analysis.

In the PTA's assessment, the requirements which the institution intends to impose on Síminn Group, which are presented in the additional consultation document, are likely to ensure continued roll-out of fibre-optics in this country and to promote additional competition. The PTA would like to reiterate that the aforesaid ERT requirement is an innovative measure and has not applied to Síminn Group with regard to fibre-optics up until now. This requirement will create a certain level of restraint regarding pricing within the group, while also granting it some leeway within the framework that will be established, and thereby promote a higher level of competition in telecommunications markets. If this does not occur, one possible course of action will be to impose a requirement at a later stage regarding cost-analyzed prices for Míla's fibre-optics.

GR stated that the discussion included in AM's report regarding the peculiar market structure that had developed in this country, and the effects that had resulted from it in the telecommunications market, was extremely poor and sparse in the PTA's additional consultation document. In spite of that, the PTA referred to the market structure being taken into account in the assessment. In the GR's assessment, this had been inadequately represented, and that it was odd in light of the many and diverse cases currently being processed and that

previously were processed on behalf of both the PTA and the Competition Authority, and that had been created due to the vertical integration of Míla and Síminn. GR did not consider that it was exaggerating when it stated that nearly all market participants in telecommunication markets were of the opinion that the vertical integration of Síminn Group was among the most serious problems on telecommunication markets today.

The PTA's position

The PTA agrees with GR that the vertical integration of Síminn Group is a competition problem in the Icelandic telecommunications market. The new requirement whereby the group shall pass ERT tests should in the PTA's assessment promote increased competition in telecommunication markets in this country. If this proves to be incorrect, the PTA will consider imposing a requirement at a later stage regarding cost-analyzed prices for Míla's fibre-optics. The PTA furthermore reiterates the important objective with the analysis, i.e., to promote continued roll-out of fibre-optics in this country.

GR stated that it was the company's opinion that the PTA's grounds for relaxing requirements had not been given adequate consideration, and that they would result in a market structure that would lead to less competition in markets, less quality of service and higher prices for consumers.

The PTA's position

The PTA disagrees with the aforesaid comment submitted by GR and refers to its previous responses earlier in this document.

GR considered it to be an irrefutable fact that in this country a market structure had been established with two consolidated companies, both of which were and had been dominant on the market, Míla in the telecommunications wholesale market and Síminn in the telecommunications retail market. By the Competition Authority's Conciliations no. 6/2013 and no. 6/2015, they had been authorized to work as one economic unit in two vertical markets. This arrangement had resulted in impediments to competition and to the progress of competition in telecommunications markets. Both companies had applied their power in the markets towards achieving serious and unnatural effects on competition. Examples of this included the case regarding the Media Act, where Síminn had repeatedly violated paragraph 5 of Article 45 of the Media Act. GR had also repeatedly pointed out the manner in which Síminn had used bundles and offers in order to direct business to Míla. Furthermore, the line charge case demonstrated that it was nearly impossible to prevent these companies to utilize funds within the group subsidize investments within the group. [...] For example, Síminn had used the line charge, which Síminn collected from users, for both copper and fibre-optics, to invest in fibre-optics installation. This case was currently under investigation by the Competition Authority.

The PTA's position

The PTA considers that the aforesaid ERT requirement will prove important for remedying the harmful pricing policy which the PTA describes in Sections 10.2 and 11.2 in the updated preliminary draft (Appendix A). The PTA also refers to its earlier responses in this document, and those in Appendix B and the updated preliminary draft (Appendix A), to the effect that the harmful effects from Síminn's television policy seem to have been decreasing lately. If the aforesaid ERT requirement will not yield the intended results, one possible course of action will be to impose a requirement on Míla at a later stage regarding cost-analyzed prices for the company's fibre-optics in the relevant wholesale markets.

GR stated that while the current situation prevailed on the Icelandic market, then GR did not consider there was cause for relaxing the requirements that had to be imposed on Míla in order to ensure that a stronger competitive market could develop here. In light of this it was unfortunate that it was planned to relax the requirements in the areas with the strongest indicators of developments of effective competition.

The PTA's position

The PTA has previously replied to a comparable comment from GR earlier in this document and refers to same.

GR wished to cite the letter from the company to the PTA dated 20 October 2020, which the company sent to the PTA regarding inquiries which the PTA had directed to the company during the process of the market analysis. That letter contained detailed information which GR considered to be of great significance regarding the items described in the additional consultation document, such as substitutability, statistics about customers switching from GR's fibre-optic network to Míla's copper network etc.

The PTA's position

The PTA has thoroughly familiarized itself with the content of the aforesaid response from GR, and it confirms various parts of what the PTA describes in its preliminary draft and the updated preliminary draft (Appendix A). The PTA has gathered various information from numerous market participants in the course of carrying out the analysis, including from Míla, Síminn, Tengir, Vodafone, Nova, Snerpa, Austurljós and Kapalvæðing. This information has proved useful in the aforesaid analysis, and for clarifying the actual structure of the Icelandic telecommunications market and competitive conditions.

However, the aforesaid letter from GR does not alter the fact that the PTA considers it the proper course of action at the present moment to stipulate the aforesaid ERT requirement instead of cost-analyzed prices for Míla's fibre-optics.

Nova referred to paragraph 73 in the additional consultation document, which concerned the competition faced by Míla due to the telecommunications networks of other telecommunications companies, including Kapalvæðing in Reykjanesbær.

Nova agreed with the PTA that there was insufficient competition pressure, but that this was a very general feature on the aforesaid markets in this country, where usually there were 1-2 participants offering services. In areas where there might be more telecommunications infrastructure companies, e.g., Reykjanes, that party, i.e., Kapalvæðing, did not have the technical capacity required to be an active participant as a wholesaler for an active retail market.

The PTA's position

The PTA considers that the aforesaid comment from Nova supports the authorities' conclusion that there is no cause for defining Reykjanesbær as a separate geographical market. Neither the cable network of Kapalvæðing, nor that company's retailing activities in the aforesaid municipality, constituted sufficient competitive restraint for Síminn Group to justify this.