PÓST- OG FJARSKIPTASTOFNUN

Decision no. xx/2016

Mila Reference Offer for Wholesale Access to Local Loops

I
Introduction

This case concerns a new Mila ehf. (Mila) Reference Offer for wholesale access to local loops which replaces the older Mila Reference Offer for open access to local loops which was mostly from the year 2009. The Post and Telecom Administration (PTA) Decision no. 21/2014 imposed on Mila the obligation to maintain transparency in leasing of copper and fibre-optic local loops and to publish a Reference Offer for wholesale access to such local loops which fulfilled the conditions set by the PTA. Pursuant to the older PTA Decision no. 26/2007, the above only applied to copper local loops.

On 9 October 2015 the PTA received the first draft of the new Mila Reference Offer. On last 2 February, the PTA opened consultation on the Reference Offer and proposed further specified amendments to the offer. This Decision deals with the amendments the PTA has decided to make to the Mila Draft Reference Offer. In this case the conditions of the Reference Offer under discussion are different from those that relate to prices and the PTA is processing a case, in parallel to this case, which relates to the Mila tariff for various services on the relevant market.

The case of cost analysis and the subsequent appendix of wholesale prices for access to local loops (M4), is expected to conclude in November along with the case of cost analysis and prices for wholesale access to bitstream (M5) including conditions and prices for the VULA product. Related to this, the PTA will ensure that Mila complies with the Equivalence of Inputs (EoI) obligation for access to fiberoptic local loops.

II
Facts of the case

With the PTA Decision no. 21/2015 on the designation of a company with significant market power and on the imposition of obligations on the market for wholesale access to access networks at a fixed location (Market 4) and wholesale broadband access (Market 5), Mila was designated as a company with significant market power in the markets in question and appropriate obligations were imposed on the company as a measure aimed at resolving the competition problems identified by the PTA on the markets in question.

With respect to Market 4 the most salient feature was that the market for wholesale network infrastructure access at a fixed location (local loops) was now considered to equally cover copper and fibre-optic local loops while the prior PTA Decision no. 26/2007 on the market in question only covered copper local loops. Among the obligations imposed on Mila on the relevant market were obligations on access, non-discrimination, transparency and price control. The last named obligation however only covered Mila copper local loops while the other obligations covered both the company's copper and fibre-optic local loops.

With respect to the obligation for transparency it was stated that the PTA, with the authority in Article 29 of the Electronic Communications Act no. 81/2003, imposed an obligation on Mila to maintain transparency in leasing of copper and fibre-optic local loops. Mila was to publish information related to access to local loops, for example on registering local loops, technical descriptions, characteristics of networks, terms and conditions for delivery and on usage and tariff. Part of this obligation was that Mila should issue a Reference Offer for local loops which fulfilled the requirements set by the PTA and which should be submitted to the PTA for endorsement no later than six months after publication of the Decision. The Reference Offer was to be maintained and updated as required and all amendments to be submitted to the PTA for endorsement.

The above specified PTA Decision was published on 13 August 2014 and Mila was obliged to submit a draft of the new Reference Offer to the Administration no later than 13 February 2015. The Mila Draft Reference Offer was however not received by the PTA until 9 October 2015 and this draft did not cover all aspects. Subsequent to this there were communications between the PTA and the company during which a more complete draft was received from the company. On 2 February 2016 the PTA initiated consultation on the Mila Draft Reference Offer. In the consultation document, the PTA among other things published proposals for more specific amendments that the Administration proposed should be made to the draft. Comments were submitted by Gagnaveita Reykjavíkur ehf. (GR) and by Fjarskipti hf. (Vodafone) last 8 March and in addition to this comments were received on that same day from Mila with respect to the amendments proposed by the PTA.

The above specified comments from GR and Vodafone were sent to Mila for comment last 17 March and the company was given notice to reply until 15 April. A letter of reply was received by the PTA from Mila last 19 April. Subsequent to the consultation in question, Mila decided to make amendments to the original Draft Reference Offer in order to make concessions to some of the comments received from parties to the market. The final Mila Draft Reference Offer for wholesale access to local loops was received by the PTA last 3 May.

The Mila draft of the Reference Offer in question contains the following documents:

1. Main text of the Reference Offer - Basic Agreement
2. Appendix 1a - Basic Service
3. Appendix 2a - Technical requirements for shared access

4. Appendix 2b - Technical requirements for fully unbundled access
5. Appendix 2c - Technical requirements for ADSL/VDSL2 signals and splitters for connection through POTS
6. Appendix 2d - Technical requirements for ADSL/VDSL2 signals and splitters for connection through ISDN
7. Appendix 2e - Technical requirements for access to copper line for VDSL2 and rules for fully unbundled access to the copper local loop
8. Appendix 2f - Technical requirements for equipment for fully unbundled access to the copper local loop
9. Appendix 2g - Access to fibre-optic local loops in the Mila access network
10. Appendix 2h – Service Level Agreements and Service Level Guarantees

Section III of this Decision will deal with comments from Mila and from other parties to the market and with the amendments that the PTA has decided to make to the Mila Draft Reference Offer. In this case the conditions of the Reference Offer under discussion are different from those that relate to prices and the PTA is processing a case, in parallel to this case, which relates to the Mila tariff for various services on the relevant market.

III.
The conclusions of the Post and Telecom Administration

3.1 Definitions - Main text of the Reference Offer - Section 1.3

3.1.1 General

In the Mila draft of the new Reference Offer, the definition of the concept "demarcation box" was deleted from the Reference Offer in force. The definition of the concept in the Reference Offer in force is to the effect that this is a network connection point at the end user. In recent PTA rules for indoor cables for electronic communications no. 1111/2015, the concept is defined in the following manner:

> *"Demarcation Box: A closable cabinet or box which houses the demarcation point of local loops or other electronic communications cable which connects subscribers in a specific building with the public electronic communications access network where a connection is made between the public electronic communications network and internal cables."*

In the consultation opened by the PTA last 2 February, the Administration proposed that the latter definition of the concept "demarcation box" should be used in the new Reference Offer. Then the PTA proposed that a definition of a new concept that had not been used previously should be added, that is to say the concept "demarcation point" which is also prescribed in the above specified PTA rules from 2015:

> *"Demarcation point: A location where a cable in the public electronic communications network is brought into a building and connected to internal cables. This is a physical network connection point where the subscriber is provided access to the public electronic communications network. The location of the network connection point for the purpose of these rules is the first connection point within the external walls, more specifically at the connection between a patch panel on the*

electronic communication company's cable end and a patch panel for internal cables."

In the Mila draft of the new Reference Offer, the definition of the concept "sub-loop" was also deleted from the Reference Offer in force. The definition in the Reference Offer in force was to the effect that this was the part of the local loop between a connection cabinet and a demarcation box. In the above specified consultation, the PTA considered it necessary that the definition of the concept in question remained in the Reference Offer. This concept however only applied to the copper local loop. The PTA proposed that the concept be defined as follows:

> ***"Sub-loop:*** *The part of a copper local loop between the street cabinet to the demarcation point in the end user's demarcation box."*

Mila defined the concept "local loop" in the draft of the new Reference Offer in the same manner as in the Reference Offer in force, that is to say copper cable which connects the distribution frame, or equivalent facilities in the access network, to the demarcation box. In the above specified national consultation document it is stated that as the PTA Decision no. 21/2014 prescribes that the wholesale market for network infrastructure access at a fixed location (local loops) was technically independent, it now covered fibre-optic local loops no less than copper local loops. It was therefore clear that the concept definition in question needed to be changed. The PTA proposed that the concept "local loop" be defined as follows:

> ***Local loop:*** *"Physical electronic communications network infrastructure in a technology independent access network, including copper and fibre-optic lines, through which it is possible to provide electronic communications services and that are generally not shared between users. On the one hand there is the section which connects network connection points of users with the distribution frame in a telephone exchange in the case of copper wire and on the other hand, in the case of fibre-optic, the final section of the fibre-optic system to users, that is to say from an exchange or from node points.*

3.1.2 Opinions of stakeholders

GR supported the PTA proposals to the effect that the definition of "local loop" needed to be updated in such a manner that it referred both to copper local loops and fibre-optic local loops and that in addition it was necessary to harmonise definitions with the text in the new PTA rules on internal electronic communication cables. One could see from the text of the Draft Reference Offer that it originated from a description of copper local loops. It would make the text clearer as a text for agreements if it were specified what should only apply to copper local loops instead of continuing to simply use the term "local loops".

In comments from Vodafone it was stated that with its Draft Reference Offer, Mila had requested that the concept "sub-loop" be deleted. The PTA had not accepted this request, but nevertheless considered that the concept should only cover copper local loops and not fibre-optic local loops. In the opinion of Vodafone, the concept in question should remain in the Reference Offer and should also apply to fibre-optic local loops. The reason for this was that non-discrimination should be assured, as in some instances there were only fibre-optic local loops in residential premises, particularly in new builds.

In Vodafone's comments it was also stated that the PTA had considered it important to define the concept "local loop" in such a manner that it also applied to fibre-optic local loops. This fact supported the above arguments provided by Vodafone. Vodafone agreed with the PTA on this issue, but considered it extremely important to ensure that it be possible to connect the fibre-optic local loop with P2P equipment in an exchange or at node points. This was not dealt with in the existing definition, but it was important that such a possibility be assured. It was Vodafone's opinion that there should be equal access to fibre-optic near ends independent of technology as it could in some instances be more economical for electronic communications companies to purchase trunk line connections from an electronic communications company other than Mila. For it to be possible to assure such competition on the market, it would be necessary to ensure that the concept "local loop" provided the above specified possibility.

3.1.3 Mila's opinion

It was stated in Mila comments on PTA proposals for definitions of "demarcation box" and "demarcation point" that they were from the PTA rules on internal electronic communication cables no. 1111/2015, as stated by the PTA.

Mila wished to emphasise the points it had previously attempted to communicate to the PTA with respect to the PTA definition of demarcation point. In the opinion of Mila this definition was faulty, that is to say that demarcation point was the first connection point within an outside wall. The fact was that cables often entered at varying locations in buildings. According to this rule there could therefore be many demarcation points, which was not normal in the opinion of Mila. As Mila had pointed out, there should only be one location in a building deemed to be a demarcation point. It should be at a convenient location where internal and external cables came together, such as close to telephone cables or an electricity fuse box. It seems that allowance is made in this instance for a linking cable from the point where the external cable enters a building to a convenient location for a demarcation box, and it was in fact the practice at many locations to lay such cable. Using this definition, it would not be clear which location would be considered to be the demarcation point and which the demarcation box.

Mila would like to word it is such a manner that the demarcation point was the location where the cable in the public electronic communications network connected to internal cables, more specifically, where there was easy access to cable routes such as for telephone and electricity.

With respect to the Vodafone comments, Mila stated that the Vodafone assertion that Mila had requested that the definition of the concept "sub-loop" be deleted from the Reference Offer was incorrect. The definition of the concept in question had ceased to be included during the processing of the Reference Offer. Mila did not however agree with Vodafone that the concept in question also applied to fibre-optic. The Mila understanding harmonised with foreign precedent and with the understanding of the PTA.

Mila could agree with GR that in some instances one could define more clearly whether reference was being made to copper, fibre-optic or to local loops in general in Appendix 1a. Mila would review the section and send it to the PTA at the first opportunity.

Mila also disagreed with the Vodafone deliberations on definition of the concept "local loop" among other things with respect to failure to address access to fibre-optic local loop. The fact of the matter was that fibre local loop was defined in a specific manner in the PTA Decision no. 21/2014. Should there not be sufficient capacity to provide a fibre-optic local loop from a central connection point, then it was recognised that it would be possible to meet the need with bitstream or virtual access.

In addition to this, Mila did not understand what Vodafone meant by its comment "that there needed to be equal access to fibre-optic near ends, independent of technology. The fact of the matter was that the Mila fibre-optic system was mostly based on PTMT architecture which meant that there was no unbundled fibre-optic thread from technical spaces to end users. It was thus not technically possible to provide this access to the Mila fibre-optic system at such locations.

3.1.4 The position of the PTA

With respect to definition of the concept "local loop", Mila defined the concept in the draft of the new Reference Offer in the same manner as in the Reference Offer in force, that is to say copper cable which connects the distribution frame or equivalent facilities in the access network to the demarcation box. In the above specified national consultation document it is stated that as the PTA Decision no. 21/2014 prescribes that the wholesale market for access to public access networks at a fixed location (local loops) was technically independent, it now covered fibre-optic local loops no less than copper local loops. It was therefore clear that the concept definition in question needed to be changed and the PTA proposed a new definition of the concept, as is stated here above.

GR supported the PTA proposals for the need to update the definition of "local loop" such that it covered both copper and fibre-optic local loops. Vodafone agreed with the PTA and considered it nevertheless extremely important to ensure that it be possible to connect the fibre-optic local loop with P2P equipment in an exchange or at node points. It was Vodafone's opinion that there should be equal access to fibre-optic near ends independent of technology as it could in some instances be more economical for electronic communications companies to purchase trunk line connections from an electronic communications company other than Mila. For it to be possible to assure such competition on the market, it would be necessary to ensure that the concept "local loop" provided the above specified possibility. Mila disagreed with the Vodafone assertions to the effect that access to fibre-optic local loops had not been covered. The fact of the matter was that fibre local loop was defined in a specific manner in the PTA Decision no. 21/2014. Should there be insufficient capacity to provide a fibre-optic local loop from a central connection point, then it was recognised that it would be possible to meet the need with bitstream or virtual access.

In the above-mentioned PTA Decision no. 21/2014 one can find the discussion on the concept “local loop” shown here below:

> *“The concept local loop is used about that part of the access network which is generally not shared with other users or where the sharing is very limited, for example with people living in the same house. This means in other words, that the local loop is on the one hand the part which connects the user network connection point with the distribution frame in the telephone exchange or street cabinet in the case of copper wire and on the other hand, in the case of fibre-optic to end users, it is the last section of the fibre-optic system for example from the exchange or from nodes analogous to distribution frames. In the same way that each copper wire pair that forms one telephone line is considered to be a local loop, each separate service connection in the fibre-optic network is one local loop. Such a service connection is normally implemented with one fibre-optic thread but connections using a pair of fibre-optic threads are also known.”*

In instances of networks with GPON the design uses a passive splitter, often located in the well. The part of the access network which is not shared with others lies thus from such a well to the user. Access to such wells is problematic, particularly if the local loop is to be used for developing a P2P access network. The party requesting access would need to lay at least as many threads to such a well as there are end users. Then one would need to connect a thread from the residential property in question to a thread from the party requesting access. It is clear that such a process is not economical.

It is not possible to grant access to part of a local loop, as is the case in copper networks, when the local loop is fibre-optic. It is not technically possible to connect into fibre-optic and add a connection to the line or remove a connection in this manner. The electrical properties of copper wire make access to part of the local loop possible, but fibre-optic technology simply does not offer such a possibility. With respect to shared access, it is technically possible to send a number of connections through fibre-optic with multiplexing, but such equipment is in no way economically feasible for the consumer market.

As Mila has chosen to develop its fibre-optic access network using GPON, it is not possible for Mila to provide access to the local loop in such a manner that the party requesting access can be allocated “a dark fibre thread” from the telephone exchange or technical space, for use on his own bitstream network. Mila is also subject to an obligation for wholesale access on the market for bitstream service (Market 5) and the company is obliged to provide such access, including virtual network access (VULA) where access shall be as similar as possible to circumstances where parties requesting access operate their own bitstream network.

Definition of markets is also developing in Europe and in the next market analysis of the local loop and bitstream markets which the PTA will make, the local loop and bitstream markets will be entwined and become two sides of the same coin[1]. This is because it is now

[1] See Commission Recommendation on Relevant Product and Service Markets within the electronic communications sector susceptible to *ex ante* regulation in accordance with Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communications

recognised that fibre-optic local loops are subject to limitations. The same kind of limitations exist to access to copper local loops when VDSL2 service is operated with vectoring. This is why in the next definition of the markets in question, additional emphasis will be placed on resolving access requests with bitstream solutions like VULA.

With all of the above in mind, the PTA intends to maintain the definition of the concept "local loop" which was used in the above specified PTA consultation document. The concept shall thus be worded as follows in Section 1.3 in the main text of the Reference Offer:

> ***Local loop:*** *"Physical electronic communications network infrastructure in a technology independent access network, including copper and fibre-optic lines, through which it is possible to provide electronic communications services and that are generally not shared between users. On the one hand there is the section which connects network connection points of users with the distribution frame in a telephone exchange in the case of copper wire and on the other hand, in the case of fibre-optic, the final section of the fibre-optic system to users, that is to say from an exchange or from node points.*

With respect to the definition of "sub-loop", Mila has provided the information that the definition had been accidentally deleted in a review of the Reference Offer. It is thus not disputed that the definition below shall be used in the new Reference Offer. The concept shall thus be worded as follows in Section 1.3 in the main text of the Reference Offer:

> ***"Sub-loop:*** *The part of a copper local loop between the street cabinet to the demarcation point in the end user's demarcation box."*

With reference to the definition of the concept "demarcation box", it was stated here above that in the Mila draft of the new Reference Offer, the definition of the concept "demarcation box" had been deleted from the Reference Offer in force. The definition of the concept in the Reference Offer in force is to the effect that this is a network connection point at the end user. In new PTA rules on internal electronic communications cables no. 1111/2015, the concept is defined, and in the consultation opened by the PTA on last 2 February, the Administration proposed that this definition should be used in the new Reference Offer.
Parties to the market made no objections to this intention of the PTA and therefore the concept "demarcation box" shall be worded as follows in Section 1.3 in the main text of the Reference Offer:

> *"Demarcation Box: A closable cabinet or box which houses the demarcation point of local loops or other electronic communications cable which connects subscribers in a specific building with the public electronic communications access network where a connection is made between the public electronic communications network and internal cables."*

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networks and services. See among other things, definitions of markets M3a, M3b and M4 in the Appendix to the recommendation in question. It is likely that the EFTA Surveillance Authority (ESA) will issue a similar recommendation on the relevant markets in the near future as consultation on this issue ended in March 2016.

With respect to the definition of the concept "demarcation point", the PTA proposed in the above specified consultation document that a definition of a new concept should be added, that had not been used previously, that is to say the concept "demarcation point" which is also prescribed in the above specified PTA rules on internal electronic communications cables.

GR agreed that definitions in the Mila Reference Offer needed to be updated in accordance with the rules in question on internal electronic communications cables.

Mila emphasised the points it had previously attempted to communicate to the PTA with respect to the PTA definition of the concept "demarcation point". In the opinion of Mila this definition was faulty, that is to say that demarcation point was the first connection point within an outside wall. The fact was that cables often entered at varying locations in buildings. According to this rule there could therefore be many demarcation points, which was not normal in the opinion of Mila. As Mila had pointed out, there should only be one location in a building deemed to be a demarcation point. It should be at a convenient location where internal and external cables came together, such as close to telephone cables or an electricity fuse box. It seems that allowance is made in this instance for a linking cable from the point where the external cable enters a building to a convenient location for a demarcation box, and it was in fact the practice at many locations to lay such cable. Using this definition, it would not be clear which location would be considered to be the demarcation point and which the demarcation box. Mila would like to word it is such a manner that the demarcation point was the location where the cable in the public electronic communications network connected to internal cables, more specifically, where there was easy access to cable routes such as for telephone and electricity.

In the opinion of the PTA the circumstances where electronic communications cables enter a building at various locations presents no problems. The definition of "demarcation point" is independent of the number of cables. The concept covers the network connection point where the local loop connects to internal electronic communications cables. This means that there can be more than one demarcation point if more than one local loop leads into the building at various locations though such an arrangement must be considered quite rare. With respect to the circumstances that are described and that are known in a number of instances, where the local loop is taken into an apartment building at one location and is then subsequently cabled into separately owned parts of the building through common space, for example underground car park, the rules are quite clear in this respect. Such internal cabling is in fact deemed to be a local loop *extended within external walls* as it is worded in Paragraph 2 of Article 6 of Rules 1111/2015 on internal electronic communications cables:

> *"In terraced and semi-detached houses there shall normally be a special demarcation point for each residential unit and in apartment buildings for each stairwell. Even if an underground cable is brought into a building at one stairwell or at one residential unit and is extended within external walls, between stairwells or residential units, a special demarcation point shall be made for each stairwell and residential unit. The network connection point for each stairwell or residential unit is then located at such a demarcation point."*

According to the above, the concept “demarcation point” and the rules that apply to such a demarcation point are perfectly clear and cover the circumstances specified by Mila in its submission. With the above in mind, the PTA intends to maintain the definition of the concept “demarcation point” which was used in the above specified PTA consultation document. The concept shall thus be worded as follows in Section 1.3 in the main text of the Reference Offer:

> *“Demarcation point: A location where a cable in the public electronic communications network is brought into a building and connected to internal cables. This is a physical network connection point where the subscriber is provided access to the public electronic communications network. The location of the network connection point for the purpose of these rules is the first connection point within the external walls, more specifically at the connection between a patch panel on the electronic communication company's cable end and a patch panel for internal cables.”*

3.2 Limitation of liability - Main text of the Reference Offer - Section 9

3.2.1 General

In the Mila draft of the new Reference Offer there is a new section entitled “Limitation of liability”. This is Section 9 in the main text of the Draft Reference Offer. The provision is worded as follows:

> *“Mila is not responsible for damage that can be attributed to lack of connection, interruption of electronic communications or other interference that can occur to the operations of the electronic communications network, whether this may be attributed to failures in lines, failures in exchanges or for other reasons.”*

In the above specified PTA consultation document it is stated that even though the same kind of reservation on limitation of liability can be found in the Mila Reference Offer for bitstream access and leased lines that had been endorsed by the PTA, the PTA considered that the limitation of liability in question was too comprehensive. The PTA therefore proposed that the limitation of liability should not apply when the cause of lack of connection, interruption of electronic communications or interference was caused by intent or extreme negligence on the part of Mila. The PTA therefore proposed that the provision be worded as follows:

> *“Mila is not responsible for damage that can be attributed to lack of connection, interruption of electronic communications or other interference that can occur to the operations of the electronic communications network, whether this may be attributed to failures in lines, failures in exchanges or to other reasons if the lack of connection, interruption of electronic communications or other interference in question cannot be attributed to intent or extreme negligence on the part of Mila.”*

3.2.2 Opinions of stakeholders

In the Vodafone comments it was stated that when defining other interference, Vodafone considered it important to exclude damage caused by Mila employees. In some instances, Mila employees, or subcontractors for the company, had disconnected lines where no request had been made for disconnection. In these instances, other electronic communications companies would need to send employees to the location with ensuing call-out costs. Vodafone believed that when such costs resulted from negligence or intent of an employee working on behalf of Mila, Mila should pay for the damage suffered by the electronic communications company.

3.2.3 Mila's opinion

Mila objected to the above specified amendment proposal by the PTA. With respect to Mila having to bear costs resulting from disconnection of wrong lines, Mila pointed out that it had become general practice for each party to bear his own costs in the event of faults, regardless of the nature of the faults. Mila felt that it was not normal to have to bear the cost of actions taken by a customer which could vary greatly and could have varying costs. This was in fact a blank cheque on Mila. Mila pointed out that almost 100,000 requests for changes were executed on an annual basis and that it was unavoidable that there would be some errors in their execution.

Mila pointed out that in a significantly large number of instances, Mila had had to send employees to make repairs which subsequently proved to be the responsibility of the service purchaser/customer. This applied for example to faults in the access network where something in the order of 60-70% of faults reported to Mila were in fact faults for which the service purchaser was responsible. Such faults were, all things being equal, not invoiced between the companies and Mila considered that if this possibility were introduced then the result would be a flood of such cases between the companies. It therefore came as a great surprise that Vodafone considered this to be a positive step as one could expect a loss for that company in such transactions. It would therefore be most expedient for such issues to be resolved with KPI and SLA agreements between the companies, as was the case in the Reference Offer. Mila furthermore pointed out that this related to commercial conditions subject to civil law on which the PTA did not have authority to prescribe.

3.2.4 The position of the PTA

This provision concerns limitation of Mila liability for damage that can be attributed to lack of connection, interruption of electronic communications or other interference that may occur in the operation of the Mila electronic communications network. The PTA considers that the provision as worded in the Draft Reference Offer, which was new and not to be found in the Reference Offer in force, constituted an abnormally comprehensive limitation of Mila liability. It must therefore be considered normal that the limitation of liability should not cover damage resulting from intent or extreme negligence on the part of Mila employees. This of course does not mean that liability is being imposed on Mila for events for which other parties bear responsibility and nor for events which have natural explanations and which cannot be attributed to intent or extreme negligence on the part of Mila employees. One must assume that the instances where Mila shall bear liability will be very few, and in addition to this a rule of this nature can have a cautioning impact on Mila and thus reduce the number of such instances of damage.

Mila's reference to Key Performance Indicators (KPI) and Service Level Agreements (SLA) does not alter the PTA opinion in this matter. Nor do Service Level Guarantees (SLG) either. These obligations were imposed on Mila to assure non-discrimination where among other things the obligations prescribe specific compensation that Mila must pay to other electronic communications companies if its performance is not in accordance with agreements relating to this issue, among other things with respect to processing of orders and repairs of lines. Such compensation is therefore of an entirely different nature to the general damage liability covered by Section 9 in the Draft Reference Offer.

Mila furthermore pointed out that this related to commercial conditions subject to civil law on which the PTA did not have authority to prescribe. The PTA categorically rejects that Mila can unilaterally elaborate provisions in the Reference Offer. The company bears significant obligations, among other things, for access, non-discrimination and transparency. The transparency obligation was among other things clearly worded to the effect that the Mila Draft Reference Offer would not come into force until it had been endorsed by the PTA. It is undisputed that the PTA can elaborate obligations in a very detailed manner in its market analyses. On the other hand the implementation has been such with the PTA that the PTA forms the main substance of the obligations in its market analysis and further elaborates these obligations in the resulting decisions, among other things with respect to cost analysis and tariffs of a party with market dominance and then with respect to other conditions of the Reference Offer. No objections have been raised to this implementation throughout the years. Mila would of course not be better placed if the PTA could reject the provision in question but could not propose amendments to it. If this were the case then Mila liability would be greater than it actually is with the amended provision as proposed by the PTA, and as agreed on by Vodafone.

With all of the above in mind, the PTA intends to adhere to the amendment in the above specified consultation document that it proposed with respect to Section 9. The concept shall thus be worded as follows in Section 9 in the main text of the Reference Offer:

> *"Mila is not responsible for damage that can be attributed to lack of connection, interruption of electronic communications or other interference that can occur to the operations of the electronic communications network, whether this may be attributed to failures in lines, failures in exchanges or to other reasons if the lack of connection, interruption of electronic communications or other interference in question cannot be attributed to intent or extreme negligence on the part of Mila."*

3.3 Payment guarantee - Main text of the Reference Offer - Section 13

3.3.1 General

In the Mila draft of the new Reference Offer there is a provision in Section 13 on payment guarantee which is worded as follows:

"Mila is authorised to request a guarantee from a service purchaser that the conditions of the agreement and of its appendices will be honoured. Should a guarantee be requested then it shall be in accordance with the expected scope of business. Mila is also authorised to demand adequate guarantees for investments that need to be made to meet the requests of service purchasers for access to local loops.

The last Clause was new and for this reason cannot be found in the Reference Offer in force. In the above specified consultation document, the PTA considered that the Clause in question was too comprehensive. It was generally the case that service purchasers paid Mila a specific monthly charge for access and possibly also a start-up charge. These charges were examined and endorsed by the PTA, at least with respect to copper local loops. It was therefore not normal that Mila could request special guarantees for necessary procedures in its local loop system which the start-up and monthly charges should cover. The PTA furthermore considered that the general payment guarantee provisions in Clauses 1 and 2 should never be a larger amount than the equivalent of 3 months trading between the parties. The PTA therefore proposed that the provision be worded as follows:

"Mila is authorised to request a guarantee from a service purchaser that the conditions of the agreement and of its appendices will be honoured. Should a guarantee be requested then it shall be in accordance with the expected scope of business. Mila is also authorised to demand adequate guarantees for investments that need to be made to meet the special requests of service purchasers for access to local loops. This last clause only applies in exceptional instances and then only for investments that do not form the basis for monthly charges and start-up charges for local loop lease."

3.3.2 Mila's opinion

In the Mila comments it was stated that the company could accept the PTA proposal for amendment in question as in the opinion of Mila it did not constitute significant material alteration to the conditions in question. Mila however made a general reservation with respect to the PTA authority to prescribe general business conditions for Mila

3.3.3 The position of the PTA

As there is no dispute on the amendment proposed by the Administration in the above specified consultation document with respect to Section 13, the PTA plans to adhere to the amendment. The concept shall thus be worded as follows in Section 13 in the main text of the Reference Offer:

"Mila is authorised to request a guarantee from a service purchaser that the conditions of the agreement and of its appendices will be honoured. Should a guarantee be requested then it shall be in accordance with the expected scope of business. Mila is also authorised to demand adequate guarantees for investments that need to be made to meet the special requests of service purchasers for access to local loops. This last Clause only applies in exceptional instances and then only for investments that do not form the basis for monthly charges and start-up charges for local loop lease."

3.4 Transfer of rights and obligations - Main text of the Reference Offer - Section 14

3.4.1 General

In the draft of the new Reference Offer one can find provisions on transfer of rights and obligations to third parties in Section 14. It was worded as follows:

> *"The service purchaser is unauthorised to transfer rights and obligations pursuant to this agreement without written permission from Mila.*
>
> *A service purchaser is however authorised to transfer rights and obligations pursuant to the agreement to other companies in a company group which it owns entirely on condition that the licence in question is transferred to the receiving company which declares in writing to Mila that it takes over all obligations of the transferor pursuant to the agreement."*

In the above specified PTA consultation document it was stated that provisions in the Reference Offer in force relating to this issue were reciprocal, that is to say that they prescribed that rights and obligations pursuant to the agreement would not be transferred or given to other parties without written permission of the counterparty, that is to say neither by Mila nor by service purchasers. The PTA considered it abnormal to cancel this reciprocity. For this reason the PTA proposed that the provision be unchanged from the Reference Offer in force and that it be worded as follows:

> *Rights and obligations pursuant to this agreement shall not be transferred or given to another party without written permission of the counterparty.*
>
> *Parties are however authorised to transfer rights and obligations pursuant to the agreement to other companies in a company group which it owns entirely on condition that the licence in question is transferred to the receiving company which declares in writing to Mila that it takes over all obligations of the transferor pursuant to the agreement."*

3.4.2 The position of the PTA

As there is no dispute on the amendment proposed by the Administration in the above specified consultation document with respect to Section 14, the PTA plans to adhere to the amendment The concept shall thus be worded as follows in Section 14 in the main text of the Reference Offer:

> *Rights and obligations pursuant to this agreement shall not be transferred or given to another party without written permission of the counterparty.*
>
> *Parties are however authorised to transfer rights and obligations pursuant to the agreement to other companies in a company group which it owns entirely on condition that the licence in question is transferred to the receiving company which declares in writing to Mila that it takes over all obligations of the transferor pursuant to the agreement."*

3.5 Definition of VULA - Appendix 1a - Section 1

3.5.1 General

In Section 1 of Appendix 1a to the Draft Reference Offer in question there are definitions. In these definitions the concept “local loop” was among other things, defined in the same manner as in the main text of the Draft Reference Offer, that is to say allowance was only made for copper local loops. In the above specified consultation document, the PTA proposed that this definition be removed from this Section and that the amended definition proposed by the PTA in the main text of the draft would apply.

There it was stated that Mila had defined the concept VULA as “Virtual Unbundling Local Access”. The PTA considered it proper to use “open virtual access to the local loop” followed by the English text in brackets. This was in accordance with the use of concepts in PTA Decision no. 21/2014.

3.5.2 The position of the PTA

In accordance with Section 3.1 here above, the definition of the concept “local loop” proposed by the PTA shall apply. As the concept is defined in Section 1.3 in the main text of the Draft Reference Offer it is unnecessary to define it again in the Appendix in question.

In addition, a definition of the concept VULA shall be added to Section 1 of Appendix 1a which shall be worded as follows:

> *“VULA: Open virtual access to the local loop (Virtual Unbundling Local Access)”.*

3.6 Vacating premises and migration from copper local loops to fibre-optic local loops - Appendix 1a - Items 11 and 13 in Section 3

3.6.1 General

In the Mila draft to Item 11 of Section 3 of Appendix 1a to the Draft Reference Offer, the following conditions can be found:

> *“Should it be necessary to vacate or alter premises for which Mila is responsible, which contain cables from electronic communications companies, the owners of such cables bear each individually, the costs resulting from such changes. Should agreement not be reached between parties, the PTA can decide a division of costs.”*

In the above mentioned PTA consultation document it was stated that Mila had deleted the words *“for reasons for which the service purchaser is responsible”* when compared with the wording of the Reference Offer in question. The PTA furthermore did not consider there to be reason to accept this amendment and the Administration proposed that the provision be unchanged and that it be worded as follows:

> *“Should it be necessary for reasons for which the service purchaser is responsible, to vacate or alter premises for which Mila is responsible, which contain cables from electronic communications companies, the owners of such cables bear each*

> *individually, the costs resulting from such changes. Should agreement not be reached between parties, the PTA can decide a division of costs."*

In the Mila draft to item 13 of Section 3 of Appendix 1a the following conditions can be found, which are new:

> *"Mila reserves the right to evaluate in each instance when a fault occurs in a copper local loop, whether it is possible or more economical to transfer the local loop lease service to a fibre-optic connection instead of repairing the copper local loop."*

In the above specified consultation document, the PTA considered it imprudent to accept such unilateral control over migration from copper to fibre-optic without prior agreement from end users and service purchasers. The PTA therefore proposed that the provision be worded as follows:

> *"Mila reserves the right to evaluate in each instance when a fault occurs in a copper local loop, whether it is possible or more economical to transfer the local loop lease service to a fibre-optic connection instead of repairing the copper local loop. Such migration from copper to fibre-optic can however only take place subsequent to receipt of agreement of end users and service purchasers."*

A tariff for local loop lease could be found in Section 8 of Appendix 1a in the Draft Reference Offer. The PTA considered that having a section on tariff in a separate Appendix would increase transparency. The PTA proposed that this would be Appendix 1b. Finally, the PTA stated specifically that in other respects the Mila tariff for local loop lease would not be discussed materially as a separate case had been opened for that scrutiny.

3.6.2 Opinions of parties to the market

In the Vodafone comments it was stated that Mila had made a proposal in its conditions with respect to the vacating premises that the words "for reasons for which the service purchaser is responsible" be deleted. The PTA had not accepted the Mila proposal and had proposed that the provision remain unchanged. It was Vodafone's opinion that in instances like this, Mila should bear the cost of changes that were made. Mila sold access to its building for which it charged a fee. The costs incurred with alterations should thus totally be borne by Mila. Mila was the company which profited from selling hosting to new parties, which meant that Mila should meet costs incurred in enabling entry of new parties. Other electronic communications companies that were already in situ should not participate in Mila costs related to cables that Mila employees laid themselves. The Vodafone views harmonised with the principles of non-discrimination and proportionality in administrative law.

3.6.3 Mila's opinion

With respect to Item 11 of Section 3 in Appendix 1a to the Draft Reference Offer, Mila objected to the change that the PTA planned to make. Mila objected to the fact that the conditions should only apply to payment of costs if premises controlled by Mila needed to be vacated *"for reasons that the service purchaser was responsible"*.

In the first case, Mila did not own all of the hosting space which meant that in many instances Mila was dependent on decisions by the renter for amendments to or termination of the lease agreement In the second case, external circumstances such as instructions from official parties as a result of organisational changes could lead to a need to vacate or to change the location of the hosting. It was extremely unfair that such changes and adaptations should be entirely at Mila's cost. It was appropriate to point out that the practice with Mila for many years had been that each and every one paid his costs for moving his own cables when it was unavoidable to take such action. This had been done in good cooperation with parties to the market. Mila considered that such limitation of Mila's freedom to make agreements had no grounding in PTA's authority. Mila therefore proposed that the provision be worded as follows:

> *"Should it be unavoidable to vacate or alter premises for which Mila is responsible, which contain cables from electronic communications companies, the owners of such cables bear each individually, the costs resulting from such changes. Should agreement not be reached between parties, the PTA can decide a division of costs."*

In the Mila comments on the above specified Vodafone opinion, it was stated that with the Item in question no. 11 in Section 3 of the Appendix, Mila had not intended that customers should bear costs for alterations to distribution frames that were made because of new customers. This provision was included in instances where Mila needed to move facilities to new premises or when the owner of a building, other than Mila, demanded alterations to Mila facilities. Mila considered that in such instances it was normal that each party bore his part of the cost of moving. In such instances it was necessary to reconstruct facilities at a new location which meant that it was normal to treat the changes as termination of use of premises with subsequent reconstruction of facilities at a new location. This provision was normal and fair as at many locations the Mila technical space was located in premises owned by another party, which meant that Mila was therefore dependent on possible expiry of the lease agreement or that it might be terminated. In those instances, Mila would of course provide new premises into which it would be possible to move equipment and devices in order to minimise interference of service. Mila reiterated that this was a case of a business agreement governed by civil law which the PTA did not have authority to alter.

3.6.4 The position of the PTA

Mila collects charges for hosting on the basis of the company's opex and capex in accordance with the obligation for price control and Mila's costs for the premises it rents out at any given time are collected with these charges. For this reason it is not possible to conclude that costs should accrue entirely to Mila for the changes in question, as asserted by the company.

As the PTA prescribes that the provision shall remain unchanged there is no change to the criteria on which Mila calculations are based when identifying costs for hosting.

With all of the above in mind, the PTA intends to adhere to the amendment that it proposed in the above specified consultation document with respect to Item 11 of Section 3 of Appendix 1a to the Draft Reference Offer.

"Should it be necessary for reasons for which the service purchaser is responsible, to vacate or alter premises for which Mila is responsible, which contain cables from electronic communications companies, the owners of such cables bear each individually, the costs resulting from such changes. Should agreement not be reached between parties, the PTA can decide a division of costs."

As there is no dispute on the amendment proposed by the Administration in the above specified consultation document with respect to Item 13 of Section 3 of Appendix 1a to the Draft Reference Offer, the PTA plans to adhere to the amendment. The provision shall be worded as follows:

"Mila reserves the right to evaluate in each instance when a fault occurs in a copper local loop, whether it is possible or more economical to transfer the local loop lease service to a fibre-optic connection instead of repairing the copper local loop. Such migration from copper to fibre-optic can however only take place subsequent to receipt of agreement of end users and service purchasers."

3.7 Introduction of new technology - Appendix 1a - Section 5.6

3.7.1 General

In Section 5.6 in Appendix 1a to the Draft Reference Offer one can find the following provision which deals with the introduction of new technology, a provision which remains unchanged from the Reference Offer in force:

"If a service purchaser requests lease of a local loop for technology (service) which has not previously been used on a Mila local loop network, then the application shall be put into the following service process:

1. *Mila shall in cooperation with the service purchaser, assess the possible impact of introduction of the new technology on existing service in the local loop network and shall make proposals on action aimed at preventing damaging disruption of service to other service purchasers.*
2. *Mila shall notify the PTA about the actions planned for the purpose of introducing new technology in the local loop network without causing damaging disruption to other service purchasers. Mila shall at the same time request a PTA opinion on the planned actions.*
3. *Mila shall inform the service purchaser about the conclusions of the PTA opinion on the planned actions.*
4. *The service purchaser shall in cooperation with Mila, introduce the new technology in accordance with the PTA opinion on the planned actions."*

3.7.2 Opinions of parties to the market

In comments made by GR it was stated that there were no time limits on the introduction process and/or objectives for the duration of the introduction. GR considered it normal to set time limits so that Mila customers that wished to use the company's fibre-optic local loops for other technology than PON would not suffer abnormal delays in the introduction.

3.7.3 Mila's opinion

In Mila comments on the above views expressed by GR, it was stated that Mila considered that it was not possible to set time limits in this case as they would depend on the impact and on the measures that would need to be taken in the introduction and in addition to this Mila could not influence the speed at which the PTA would process the case. It should also be pointed out that Mila considered there to be no risk of crosstalk on fibre-optic cables. Crosstalk on copper lines was the main reason for the need to set special rules on new technology. The measures in the Section should therefore at most be applied in instances of new technology on copper lines, even though the Section was technology independent.

3.7.3 The position of the PTA

The purpose of the provision in question is first and foremost to present damaging disruption resulting from the introduction of new technology. GR does not make material objections to the provision but considers that time limits should be set so that Mila customers that wished to use the company's fibre-optic local loops for technology other than PON would not suffer abnormal delays in the introduction. Mila considers it to be problematic to have clear time limits in connection with this provision because of various uncertain factors, and in addition to this there is no risk of damaging disruption in the fibre-optic environment.

The PTA agrees with Mila that there is no need for a specific time limit in connection with this provision. The PTA is not aware of delays having been a problem in this connection. Mila counterparties always have the option of complaining to the PTA should they consider delays to be abnormal. The PTA would then intervene and apply pressure for the matter to be resolved without abnormal delay.

3.8 Measurements on local loops - Appendix 1a - Section 8.7

3.8.1 General

In Section 7.5 in Appendix 1a to the Reference Offer in force one can find the following provision which deals with measurements on local loops:

> *"Should a service purchaser request measurements on a local loop, the service provider shall accede to such requests. The service purchaser can request a price offer for the measurements. Should the local loop prove to be faulty then the service provider is not authorised to charge a fee for the measurements.*
>
> *The service provider shall, if at all possible, provide the service purchaser with access to measurements through the service provider's system where at least the following measurements are accessible on the service provider's local loop network:*
>
> - *Actual Upstream and Downstream Rate*
> - *Max Upstream and Downstream Rate*
> - *Attenuation Upstream and Downstream Rate*

- *Noise Margin Upstream and Downstream*
- *Transit (Tx) Power Upstream and Downstream*

The objective of the above specified measurements on the part of the service provider through the service purchaser's system is to identify possible causes of interference on the local loop network and to ensure at the same time that interference caused by crosstalk is kept to a minimum "

In Section 8.7 in Appendix 1a to the Draft Reference Offer one can find the following provision which deals with measurements on local loops:

> *"Should a service purchaser request measurements on a local loop, Mila shall accede to such requests. The service purchaser can request a price offer for the measurements. Should the local loop prove to be faulty then the service provider is not authorised to charge a fee for the measurements.*
>
> *Mila shall, if at all possible, provide access for a service purchaser to measurements through its system."*

3.8.2 Opinions of parties to the market

GR recommended that a more detailed definition be provided here as to what was meant by measurements, categorised on the one hand for copper local loops and on the other hand for fibre-optic connections. It would be particularly necessary to specify, in the text whether measurements on the fibre-optic local loop constituted readings from measurements or OTDR measurements.

3.8.3 Mila's opinion

Mila considered it unnecessary to specify exactly how the measurements would be made as they depended on whether the local loop was copper or fibre-optic. Additionally, this should be a matter for agreement with the service purchaser in connection with the price offer to him. It should be noted that these were special measurements requested by a customer, for example in connection with delivery of connections, and not general measurements for faults. Mila also made normal measurements of its fibre-optic system during its development phase.

3.8.4 The position of the PTA

According to Paragraph 1 of the Section 7.5 in force in the Appendix in question, Mila should accede to a service purchaser's request for measurements of local loops, regardless of whether they are copper or fibre-optic local loops. The PTA cannot however, accept Mila's arguments with respect to the cancellation of minimum requirements that have been in force in Paragraph 2 of the provision and that apply first and foremost to copper local loops. The PTA considers it important that the minimum requirements in question be listed in the provision as before, so that service purchasers can see examples of the kinds of measurements that could be available. The provision does not however constitute an exhaustive list. The provisions of Section 7.5 in Appendix 1a shall be as follows:

> *"Should a service purchaser request measurements on a local loop, the service provider shall accede to such requests. The service purchaser can request a price offer for the measurements. Should the local loop prove to be faulty then the service provider is not authorised to charge a fee for the measurements.*
>
> *The service provider shall, if at all possible, provide the service purchaser with access to measurements through the service provider's system where at least the following measurements are accessible on the service provider's local loop network:*
>
> - *Actual Upstream and Downstream Rate*
> - *Max Upstream and Downstream Rate*
> - *Attenuation Upstream and Downstream Rate*
> - *Noise Margin Upstream and Downstream*
> - *Transit (Tx) Power Upstream and Downstream*
>
> *The objective of the above specified measurements on the part of the service provider through the service purchaser's system is to identify possible causes of interference on the local loop network and to ensure at the same time that interference caused by crosstalk is kept to a minimum."*

3.9 Introduction to technical conditions - Appendix 2a - Section 2

3.9.1 General

In the draft of Section 2 in Appendix 2a to the Draft Reference Offer, which is the introductory Section 2 on technical conditions for shared access to the copper local loop, one can find the following conditions:

> *"Appendix 2a describes the technical characteristics of the copper line for shared access, along with general requirements for equipment that may be connected to the line. If Mila offers VULA access in CPOA then the AFF rights to connect to one's own equipment in CPOA become void.*

It was stated in the above specified consultation document that the PTA considered the latter clause of the provision to be not entirely in accordance with the obligations as they were described in PTA Decision no. 21/2014. Mila therefore proposed that the provision be worded as follows:

> *"Appendix 2a describes the technical characteristics of the copper line for shared access, along with general requirements for equipment that may be connected to the line. If Mila offers VDSL with vectoring at the relevant connection location, then the AFF rights become void. Instead of this, Mila shall provide VULA, access."*

3.9.2 The position of the PTA

As no objections were received from parties to the market or from Mila, the PTA intends to adhere to the amendment to Section 2 in Appendix 2a to the Draft Reference Offer as in the proposal that was made in the above specified consultation document. The provision shall be worded as follows:

> *"Appendix 2a describes the technical characteristics of the copper line for shared access, along with general requirements for equipment that may be connected to the line. If Mila offers VDSL with vectoring at the relevant connection location, then the AFF rights become void. Instead of this, Mila shall provide VULA, access."*

3.10 Provision on connections in technical conditions - Appendix 2a - Section 4

3.10.1 General

In the draft of Section 4 in Appendix 2a to the Draft Reference Offer, which is the introductory Section 2 on technical conditions for shared access to the copper local loop, one can find the following conditions:

> *"xDSL equipment AFF shall not be located further from CPOA than 100 m but however such that the difference between the Mila connecting cable and AFF shall not be more than 50 m. This is necessary for the signals to be of the same strength on distribution frames and in this manner minimise reciprocal crosstalk".*

In the above specified consultation document, the PTA considered it important that this provision should not be retrospective and therefore proposed that it should be worded as follows:

> *"xDSL equipment AFF shall not be located further from CPOA than 100 m but however such that the difference between the Mila connecting cable and AFF shall not be more than 50 m. This is necessary for the signals to be of the same strength on distribution frames and in this manner minimise reciprocal crosstalk". This provision does not apply to an arrangement which exceeds this reference and which is already established."*

3.10.2 The position of the PTA

As no objections were received from parties to the market or from Mila, the PTA intends to adhere to the amendment to Section 4 in Appendix 2a to the Draft Reference Offer as in the proposal that was made in the above specified consultation document. The provision shall be worded as follows:

> *"xDSL equipment AFF shall not be located further from CPOA than 100 m but however such that the difference between the Mila connecting cable and AFF shall not be more than 50 m. This is necessary for the signals to be of the same strength on distribution frames and in this manner minimise reciprocal crosstalk". This provision does not apply to an arrangement which exceeds this reference and which is already established."*

3.11 Discussion on SH DSL - Appendix 2b

3.11.1 Opinions of parties to the market

Vodafone considers that all discussion is lacking in Appendix 2b, which deals with technical conditions for shared access to local loops, on SHDSL. Vodafone requested that this be remedied. SHDSL should be discussed in the Appendix on technical conditions. It was important for it to be clear how this service would be serviced by Mila.

3.11.2 Mila's opinion

Mila considered that this was a misunderstanding on the part of Vodafone, as the matter in question was technical conditions for shared access while by the nature of things, SHDSL technology was categorised under fully unbundled access to the local loop as it was not technically possible to provide SHDSL through shared access. With respect to technical requirements for SHDSL equipment - they could be found in Appendix 2f , which dealt with technical requirements for equipment for fully unbundled access to the copper local loop Furthermore, this Reference Offer dealt with local loops and with requirements for equipment that may be used on Mila local loop networks. The reason for this discussion was that rules needed to be set for the use of local loops and on how interference could be minimised on the networks so that customers could use local loop networks with a minimum of interference.

3.11.3 The position of the PTA

The PTA considers the above specified explanations provided by Mila to be adequate and does not plan to propose amendments to the Draft Reference Offer or to its appendices. With respect to this issue. In accompanying document C to Appendix 2f, there is discussion on technical requirements for equipment for fully unbundled access to the copper local loop which deals with requirements for SHDL endpoint devices.

3.12. In general on access to Mila fibre-optic local loops - Appendix 2g

3.12.1 Opinions of parties to the market

GR stated that pursuant to the PTA Decision no. 21/2014, obligations had been imposed on Mila to accede to normal and fair requests for access to its fibre-optic local loops and related facilities at wholesale level. Access to fibre-optic local loops shall be provided from technical space/node point to the distribution frame. Mila was also obliged to authorise open access for other electronic communications companies to technical interfaces, communications protocols and other technologies that ensure interoperability of services. It was stated in the Decision that because shared access was not technically possible on fibre-optic local loops, there was an exception, where virtual access (VULA) was on offer.

The PTA had imposed the obligation on Míla that all electronic communications companies that purchased access to leased lines should enjoy the same conditions, including price, that apply to related parties or to those cooperating with Míla. In order to ensure that this was implemented the PTA had the authority to perform a technical and/or economic investigation as to whether unrelated parties could replicate the product offer of related parties in a sustainable manner.

GR considered that the Reference Offer did not fulfil the above specified condition and would argue this in more detail with reference to specific provisions in Appendix 2g in the Draft Reference Offer.

3.12.2 The position of the PTA

The PTA considers there to be no reason to take a specific position on the above assertion and views of GR under this item. These are general assertions to which it is difficult to react without further arguments from GR. The GR assertions will be discussed specifically here in the following sections where they are supported by more detailed arguments and are better defined.

3.13 Definition of the concept "demarcation box" - Appendix 2g - Section 1

3.13.1 General

In the draft of Appendix 2g which deals with fibre-optic local loops, one can find a definition of the concept "demarcation box" to the effect that this refers to a connection box where the network operator's underground cable and internal cables are connected together inside the building. In the above specified domestic consultation, the PTA proposed that this definition be deleted and that the definition presented by the PTA in Section 3.1 here above be used.

3.13.2 The position of the PTA

In accordance with the conclusion of the PTA in Section 3.1 here above, the concept "demarcation box" in Section 1 in Appendix 2g to the Draft Reference Offer be worded as follows:

> *"Demarcation Box: A closable cabinet or box which houses the demarcation point of local loops or other electronic communications cable which connects subscribers in a specific building with the public electronic communications access network where a connection is made between the public electronic communications network and internal cables."*

3.14 Definition of the concept "CPOA" - Appendix 2g - Section 1

3.14.1 General

In Section 1 of Appendix 2g to the Draft Reference Offer one can find a definition of the concept "Connection Point for Open Access for fibre-optic local loops - CPOA" as follows:

> *"Connection point for open access for fibre-optic local loops - CPOA": Network connection point, where Mila has both FDP and optical distribution frame for local loops.*

3.14.2 Opinions of parties to the market

In the comments made by GR it was stated that the Mila definition of "connection point for open access for fibre-optic local loops - CPOA" meant that Mila could unilaterally decide this location and could in reality exclude customers from using fibre-optic local loops by not installing an optical distribution frame where FDP was selected.

3.14.3 Mila's opinion

Mila said that as the Mila fibre-optic system was what is called a PTMP system then it was clear that there was not a 1:1 connection between end users and technical facility/telephone exchange. PTMP technology was the most common fibre-optic technology in use in the world today. The reason for this was that it was generally recognised that start-up and operational costs of such systems were much lower than for other possible architecture. The decision to lay a PTMP system was thus made on the basis of normal economic and commercial considerations.

It seems that in this instance, Mila's largest competitor on the local loop market who has already laid fibre-optic systems to almost half of the residential properties in the country, including to all residential properties in Reykjavik, intended to exert pressure so that Mila would be obliged to develop a less economic fibre-optic system than it otherwise could develop. In this connection it should be pointed out that the cost of such inefficiency would at the end of the day be met by the country's consumers. It should be pointed out that GR had made no mention of leasing dark fibre in its systems to other electronic communications companies while at the same time it considered it normal that Mila, which had much smaller fibre-optic distribution, should do this.

3.14.4 The position of the PTA

The Mila system design as such is not subject to PTA, obligations. Mila thus constructs its system in the manner best suited to the company's economic and operational considerations. Access obligations cover the part of the fibre-optic local loop which is whole and uninterrupted and which will not be shared with others.

In the same way that it is not technically possible to provide access to part of the copper local loop for VDSL service where another party is in situ with VDSL and vectoring, circumstances arise where it is not technically possible or operationally economic to have access to fibre-optic local loop. Mila is subject to an obligation to resolve such access with VULA solutions in bitstream service which shall replicate, as is technically possible, a situation where the party requesting access has his own bitstream system.

These problems with access are not limited to the Icelandic electronic communications market. In the most recent EU Recommendation on the relevant electronic communications market from 2014, markets for local loop lease and bitstream access have been merged into a and b parts of the same market as problems with access to local loops are increasingly being resolved with access to bitstream. One can expect that the EFTA Surveillance Authority (ESA) will soon issue an analogous Recommendation. With the above in mind, the PTA considers there to be no reason to amend the wording of the definition in question of CPOA.

3.15 Introductory Section on selection of fibre-optic technology - 2g - Section 2

3.15.1 General

In Section 2 of Appendix 2g to the Draft Reference Offer one can find introductory provisions that relate to the Mila selection of fibre-optic technology. It is worded as follows:

> *"For some considerable time, Mila has offered companies connections through fibre-optic to its trunk and access networks. Since 2007, Mila has also offered fibre-optic connections to residential properties (FTTH) based on PON technology in a number of regions in the country.*
>
> *PON technology is best suited for a company like Mila in order to minimise start-up and operational costs of an FTTH system. Most European telephone companies have chosen PON as a FTTH solution. With PON solutions it is possible to provide customers with high-speed data transfer in a very economical manner with good security of delivery. As there is no active equipment on the route from the telephone exchange/technical facility to the end user."*

3.15.2 Opinions of parties to the market

GR stated that the Section in question described Mila's arguments for selection of fibre-optic technology. Such a text did not belong in a Reference Offer endorsed by public bodies such as the PTA. GR therefore proposed that this text be removed from the Reference Offer.

3.15.3 Mila's opinion

Mila again reiterated that the company decided the design of its network development and that it was not within the authority of the PTA or of parties to the market to change this. Mila thus has every right to discuss its network development in its Reference Offer.

3.15.4 The position of the PTA

The PTA can to some extent agree with GR that the provision in question is hardly appropriate in the Reference Offer. The PTA however considers there to be no reason to order Mila to remove it from the Reference Offer as it has no material significance for the legal position of Mila counterparties. It can also be important for the network design in use to be described in the Reference Offer so that parties requesting access can more easily acquaint themselves with access possibilities on offer and with the system architecture.

3.16 PON system - Appendix 2g - Section 3

3.16.1 General

In Section 3 of Appendix 2g to the Draft Reference Offer one can find the following provision which deals with the PON system.

> *"The PON system is structured in such a manner that one fibre-optic thread is connected from the location where the central OLT equipment is hosted to a splitter which can split the light to serve up to 256 users.*
>
> *Is possible to use distributed splitting (multilayered splitting) where the signal is first split into 2 and then again with another splitter to 16 or 32 users (Figure 1).*
>
> *Is also possible to use single layer splitting with for example 1-32 1-64 splitting (Figure 2). In order to ensure good finishing of fibre-optic into residential properties, the connections are made in what are called fibre-optic demarcation boxes which shall contain patch panels to enable connections to the building's internal fibre-optic cable. Finishing in this manner significantly decreases the likelihood of fibre-optic cable being damaged in a user's home.*

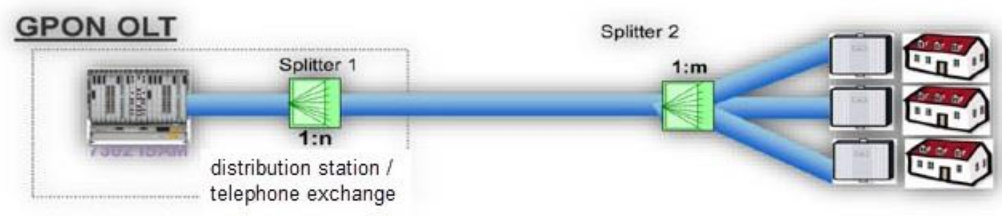

Figure 1: multilayered splitting

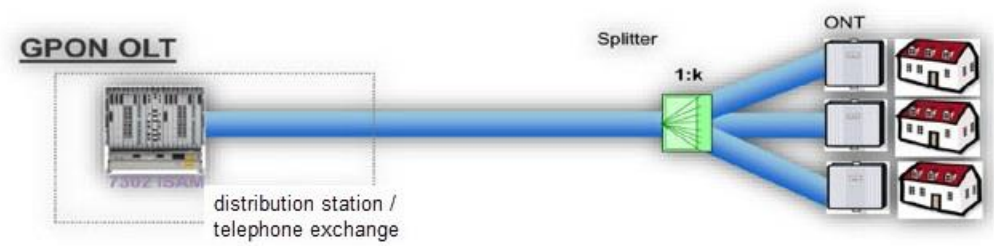

Figure 2: single layer splitting

3.16.2 Opinions of parties to the market

GR commented on the Section 3 in question in Appendix 2g. GR stated that according to Section 4, the fibre-optic local loop in the PON network was only one of 3 products categorised under fibre-optic local loops in the Mila access networks. Section 4 should deal with technical design of all 3 products with special reference to the concept CPOA, and GR directed a request that the PTA that the Administration should call for a detailed technical description from Mila.

GR did not agree with what was stated in Paragraph 3 of the Section 3 in question, that the finishing described (patch panel) decreased the likelihood of the fibre-optic cable would being damaged in user's home. In this connection, GR referred to communications that the company had had with the PTA on security faults related to such a solution.

3.16.3 Mila's opinion

Mila said that Sections 4 and 5 contained the product descriptions requested by GR and did not understand what was being referred to here. Mila rejected the GR comment on patch panels as they were the solution that should be generally used according to the new PTA rules on internal cables.

3.16.4 The position of the PTA

One could agree with GR that in the agreement text in the Reference Offer it is unnecessary to make a specific value assessment of one manner of finishing over another. It is however the main rule according to the newly issued PTA rules on domestic cables, that finishing shall be made with a patch panel, and other types of finishing are permitted subject to conditions. The PTA however considers there to be no reason to order Mila to remove the words from the Reference Offer to the effect that "a patch panel decreases the likelihood of damage" as they have no material significance for the legal position of Mila counterparties.

3.17 Product description of fibre-optic in Míla access networks - Appendix 2g - Section 4

3.17.1 General

In Section 4 in Appendix 2g to the Draft Reference Offer one can find a product description of fibre-optic in Mila access networks. The provision is worded as follows:

> *"Mila offers the following products on its fibre-optic access network.*
>
> - ***Fibre-optic local loop:*** *One fibre-optic thread from the location of the optical distribution frame, where Mila has the last optical splitter to the demarcation box at the end user's access address. This location is called CPOA and is situated at a location where Mila has adequate capacity to provide P2P fibre-optic connection to an end user.*
> - ***Fibre-optic local loop in PON network*** *constitutes a fibre-optic line from the end user to a technical facility which houses the interface between the access network and trunk line network. Fibre-optic local loop in PON network is thus a traditional local loop along with an optical splitter and backhaul fibre.*
> - ***Dedicated fibre****: Fibre-optic line (1 or 2 threads) from telephone exchange/technical facility to the access address of the end user.*
> - ***Backhaul fibre:*** *One or more of fibre-optic threads from telephone exchange/technical facility to FDP, for example for VDSL2 equipment in a street cabinet or optic splitter.*
>
> *It is possible to divide the Mila fibre-optic access networks into 2 parts, on the one hand the area that Mila has defined as the fibre-optic area and has completed the introduction of fibre-optic and on the other hand other locations in the country, where Mila has fibre-optic development has not been completed.*
>
> 1. ***Defined FTTP fibre-optic areas*** *Areas where the building of fibre-optic infrastructure (FTTP) and where access addresses have been defined in*

Mila systems as fibre-optic compatible. Fibre-optic local loops, dedicated fibre and backhaul fibre are offered in such areas.

2. ***Outside defined fibre-optic areas*** *Access addresses, or geographic regions, where Mila has not completed development of a fibre-optic network. Only dedicated fibre and backhaul fibre are offered in such areas. If a service purchaser requests fibre-optic to an access address in such an area which is not already in place, then the service purchaser may ask for an offer for the installation."*

3.17.2 Opinions of parties to the market

GR stated that in the Section 4 in question in Appendix 2g, four products were presented without it having been made clear which products the Reference Offer covered. A definition of fibre-optic area was also presented here, which GR considered too narrow. The obligation for access to a fibre-optic local loop meant that if it was on offer then selection of area could not limit access as the text of the Reference Offer says.

3.17.3 Mila's opinion

It was stated that the Mila understanding was that the Reference Offer applied to all four product types mentioned in the provision. It was however true that the PTA appeared to believe that Ljóslína (dedicated fibre) belonged to Market 6 and did not belong in this Reference Offer. All 4 products were however listed so that Mila customers could get a clearer picture of the company's product offer.

Fibre-optic areas were used here for the sake of simplification in order to distinguish between areas where Mila could offer service to most or all users from areas where development was in its early stages. Mila considered there to be nothing abnormal in defining service areas where service was on offer and pointed out that GR did the same, as for example Akureyri was outside the GR service area. There was a precedent for dividing into areas in European reference offers.

3.17.4 The position of the PTA

Ljóslína, which is dark fibre from the telephone exchange to the user, is a product on Market 6, that is to say the terminating segment of a leased line in wholesale, as mentioned by Mila. This product was mentioned here as additional information in the listing. Mila is obliged to notify the introduction of fibre-optic service, for example for technical migration and decommissioning of copper network or civil works for laying a fibre-optic network. By the very nature of things, access to fibre-optic local loops will become bound to areas in the coming months and years. Mila is subject to an obligation for non-discrimination and the Siminn Group's own retail unit will have the same access to local loops as competitors It is therefore advantageous for the Group to open access to areas as soon as it can. The PTA plans not to propose amendments to this part of the Reference Offer.

3.18 Technical conditions and delivery - fibre-optic local loop - Appendix 2g - Section 5.1

3.18.1 General

In Section 5.1 in Appendix 2g to the Draft Reference Offer the following provision can be found, which deals with technical conditions and delivery of local loops:

> *"Fibre-optic local loop can be obtained in a specified FTTP area and is defined as fibre-optic which lies from CPOA to the demarcation box of the end user. CPOA is located where it is possible to provide P2P connection to a residential property which is also the location where Mila has the last optical splitter in the PON network seen from technical space and where a distribution frame is in place.*
>
> *A service purchaser can receive access to fibre-optic local loop in the optical distribution frame located at CPOA given that there is sufficient capacity available.*
>
> *The location of CPOA depends on circumstances at each location and CPOA can be located in:*
>
> - *Telephone exchanges or other technical spaces*
> - *Street cabinets*
> - *Apartment buildings*

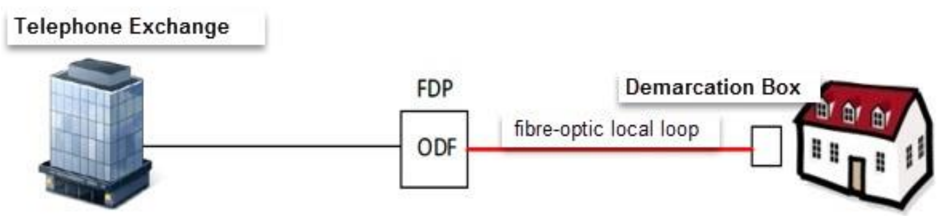

Figure 3: CPOA and fibre-optic local loop

> *A service purchaser can use its own fibre-optic or can lease a backhaul fibre line from Mila in order to connect to the optical distribution frame in CPOA. Mila is responsible for connecting fibre-optic to the distribution frame at the cost of the party requesting access.*
>
> *At the end user, the fibre-optic local loop is brought into the demarcation box using SC/APC or LC/APC connectors. Internal cables are the property and the responsibility of the owner of a building and he shall comply with recognised standards and with the PTA rules on internal cables.*
>
> *If there is no optical distribution frame in place in FDP such that there are only fixed connections in optical cable closures (cable ends soldered to optical splitters) then the location is not CPOA. At such locations the service purchaser can obtain bitstream or virtual access to fibre-optic local loops (VULA).*
>
> *A list of the residential properties and CPOA where the service purchaser can obtain access to the fibre-optic local loop can be found on the Mila service website."*

3.18.2 Opinions of parties to the market

It was stated here above by GR that Mila had stated that if the location in FDP was in cable closures then the location was not in CPOA. Fibre-optic local loop was not on offer at that location. Mila could thus with selection of FDP locations in reality prevent a service purchaser from being able to purchase local loops from the company, even where capacity was available in the Mila fibre-optic system. GR considered that this was contrary to the

PTA Decision no. 21/2014 and requested that the PTA obtain an independent technical assessment of whether unrelated parties could in reality replicate the Mila product offer in accordance with the Decision in question.

Mila referred to the fact that if CPOA was not in place then the service purchaser could obtain access to bitstream or virtual access to the fibre-optic local loop. This access was not described in more detail and nor was information given on the price of such access. In this connection. GR referred to a meeting with the PTA and Mila with respect to a request for access to fibre-optic local loops in Úlfarsárdalur where it had been stated that such information would be given in the revised Reference Offer. It had also been stated that if access was requested, which was different from CPOA access or open virtual access to part of the fibre-optic local loop (VULA), then this would be a more expensive product. GR had repeatedly requested these prices from Mila but without success. According to information from Mila, these prices should have been in the Reference Offer, but this was not the case. This was unfortunate and would be rectified.

Vodafone stated that in Section 6 there was discussion on CPOA areas where it was possible to provide P2P service. There it was stated that a service purchaser could obtain access to fibre-optic local loop in an optical distribution frame located at CPOA given that there was sufficient capacity available. It was the opinion of Vodafone that it was most important that Mila ensured that adequate capacity was available and should take the appropriate measures Furthermore, Mila should be obliged to maintain such capacity and to ensure that there was access to electricity on-site.

With respect to connections to end users it was Vodafone's opinion that the situation was getting worse as the arrangement prescribed in Section 5.1 meant that each and every electronic communications company did not have the option of installing its own fibre-optic equipment, but rather had to limit itself to PON technology, and thus to that type of endpoint device. New Mila endpoint devices today only offered 1 Ethernet port which meant that it was not possible to provide separate electronic communication companies, with Internet, VoIP and IPTV connections. This was a significant step backwards in Vodafone's opinion and it was extremely important to make amendments here. In order to ensure that the endpoint device offered the possibility to provide separate electronic communication companies with Internet, VoIP and IP TV connections

3.18.3 Mila's opinion

With respect to the GR point of view, Mila considered that the conditions were fully in accordance with the PTA Decision no. 21/2014. An optical distribution frame would be installed at a location that suited Mila development as it was undisputed that technical development was the remit of Mila. Mila considered that pursuant to the principle of proportionality, open bitstream or virtual access sufficed to fulfil the obligations imposed on the market Such access was considered sufficient in all European countries according to the Cullen international database, except Ireland where it had been decided to use wavelength access (but this implementation was still in the process of development in that country, as the technical solution that was chosen was still significantly expensive). It was pointed out that Mila and its predecessors had built up their fibre-optic system over a period of 2 to 3 decades and that it was necessary to be able to make use of those investments, but these systems had only been developed with the needs of PTMP systems in mind in a minority of cases. It would therefore be significantly burdensome if Mila were to be obliged to change its design at this point in time.

Bitstream and virtual access belong technically to Market 5 and for this reason they were not discussed in the Reference Offer for Market 4. GR appears to have misunderstood which Reference Offer had been referred to at the meeting in question with GR, PTA and Mila. When that meeting took place, Mila had already submitted its proposal for a Reference Offer for Market 4 some time before.

With respect to the Vodafone point of view, Mila stated that the Vodafone comment indicated a certain misunderstanding. There was PTP design in CPOA design, that is to say that all things being equal, there should be sufficient capacity of fibre-optic from CPOA to end users, though circumstances could arise where capacity was lacking in the same way as can occur in the existing copper system. In such instances, Mila would assess whether there was reason to add fibre-optic threads on the basis of the obligations and commercial considerations.

Mila developed its local loop system according to recognised design which Mila considered to be the most economical available, that is to say PTMP (PON). Mila and the predecessors of the company had built up their fibre-optic system over a long period of time and for most of that time they used PTMP technology. It would therefore be significantly burdensome to demand that Mila changed its technology and Mila considered that the PTA lacked authority to impose obligations on something of this nature. Mila also pointed out that it was the access network itself that was PTMP.

Mila did not understand the Vodafone comment that it was necessary to ensure access to "protected electricity on-site". Mila considered that in fact the sentence was so confusing that it was hardly possible to guess what it meant. If it meant that Mila was to be obliged to provide access to protected electricity in CPOA then it should be pointed out that CPOA could be in a street cabinet where even Mila had no access to electricity. In such instances, other network operators could lay their own fibre-optic to CPOA and extend the Mila fibre-optic cable into a central location or they could set up their own street cabinet with equipment. It would be normal that a network operator who needed electricity at such a CPOA should also lay an electricity cable as part of the same task, as Mila did not need electricity at such locations

With respect to the Vodafone comment on there being one port in the Mila endpoint device, Mila refers to its answer to the PTA on the same issue. It was however pointed out that this was a Reference Offer for Market 4 while the comment appears to concern endpoint equipment on Market 5. Mila therefore considered that the comment did not belong in this discussion.

3.18.4 The position of the PTA

As is stated in the answer to item 3.14, Mila system design is the remit of the company. Though access to the local loop is only available at those places where there is an optical distribution frame, the PTA does not have authority to influence where the company locates such distribution frames. The PTA reminds that defined markets for access are merging and it is becoming more and more common in countries that the PTA compares itself with, that access is provided with bitstream solutions because of problems with access to fibre-optic local loops. The PTA therefore does not see a reason to prescribe amendments to the above specified Section of the Reference Offer.

3.19 Limitation on delivering of fibre-optic capacity - Appendix 2g - Section 5.3

3.19.1 General

In Section 5.3 in Appendix 2g to the Draft Reference Offer the following provision can be found, which deals with limitation on delivery of fibre-optic capacity:

> *"Mila reserves the right to reject requests if capacity is not available. Mila also reserves the right to retain sufficient fibre-optic capacity to fulfil the needs of Mila PON system pursuant to Mila design criteria at any given time.*
>
> *It is not permitted to use a stronger laser than IEC 825, safety category 3R without special permission from Mila."*

3.19.2 Opinions of parties to the market

It was stated by Vodafone that Mila reserved the right to reject requests if capacity was not available. Mila also reserved the right to retain sufficient fibre-optic capacity to fulfil the needs of the Mila PON system pursuant to Mila design criteria at any given time. Vodafone believed that there was a need for greater transparency in these limitations. In the event of a rejection, Mila had to demonstrate in a visible manner that capacity was not available. There was also a need to provide a better definition of when Mila had authority to retain capacity in order to fulfil PON needs. Vodafone believed that these provisions needed to be explained more clearly as they represented an exception from the main rule for access.

Vodafone also commented on the fact that in Section 5 on fibre-optic local loops, allowance was only made for one type of local loop. It was Vodafone's opinion that the PTA needed to ensure increased supply and not to limit it solely to one type.

3.19.3 Mila's opinion

Mila stated that the company considered the limitations in question to be as clear as possible as it was clear that the Mila access networks changed from day-to-day depending on the number of users on the networks. Mila did not understand the Vodafone comment to the effect that Mila needed to demonstrate in a visible manner that capacity was not available. Fibre-optic cable was buried in the ground and in the case of the PTMP system it could be expensive to demonstrate "in a visible manner" a lack of capacity. Mila considered that the PTA had sufficient authority to resolve such a dispute and that it was unnecessary to put such provisions in the Reference Offer.

Finally, Vodafone had made a comment to the effect that in the Mila Reference Offer there was only one type of fibre-optic on offer. Mila did not understand this comment. Did Vodafone want Mila to offer what is called “multimode” fibre-optic in its local loop networks? This was not an option from the Mila point of view because this is a technology which has a much shorter range and was intended for internal use, for example in hosting halls and in data centres. Equipment intended for “single mode” fibre-optic would not be used on “multimode” fibre-optic and vice versa. This would also double the costs of connections and threads. With reference to the above Mila would limit itself to only offering what are called “single mode” fibre-optic.

3.19.4 The position of the PTA

The PTA considers it positive if Mila can inform customers about its capacity status and demonstrate the reasons for rejecting access through taking such an initiative. The PTA has on the other hand, authorisation to resolve disputes on such access should they occur but Mila could, with increased transparency, reduce the need for parties to the market to resort to the measure of referring cases to the PTA. Having said that, the PTA does not consider there to be a need to amend the text of the Reference Offer in this respect.

On the question of the Vodafone comment that allowance was only made for one type of fibre-optic in the Mila system, one could only say the same as has already been stated. The PTA has no authority to intervene in the technical design of the Mila fibre-optic system pursuant to the PTA Decision no. 21/2014. No such obligation was imposed on Mila in that Decision.

3.20 Limitations on compensation - Appendix 2h - Section 4.5

3.20.1 General

In the draft to Appendix 2h, which deals with service level agreements and quality assurance one can find provisions on limitations to compensation in Section 4.5. Paragraph 3 of the Section in question contains this provision:

> *“Compensation is only paid to service purchasers who have 10 or more orders/faults in each category and area in the month in question.”*

In the above specified consultation document, the PTA considers the above specified limitation on payment of compensation to be abnormal and not supported by arguments. The PTA proposed that the provision in question be deleted.

3.20.2 Mila’s opinion

Mila objected to the PTA proposal to the effect that limitations on payment of compensation be deleted. The reason for these limitations was to avoid small invoices, where the cost of processing such cases would be far in excess of possible compensation and this applied both to Mila and to the service purchasers. Additionally, this meant that a fault on one local loop would have an abnormally high weighting when there were so few connections, which would distort in this manner the statistical processing.

3.20.3 The position of the PTA

Having taken the Mila explanations into account, the PTA can to some extent accept them. The PTA considers a threshold of up to 10 orders or faults too high. It is possible to reduce this threshold significantly and at the same time avoid the processing of a large number of small invoices, and faults on individual local loops do have an abnormally high weighting in this connection. The PTA proposes that the limit should be set at 5 orders or faults.

The provisions of Paragraph 3 of Section 4.5 in Appendix 2h shall be worded as follows:

> *"Compensation is only paid to service purchasers who have 5 or more orders/faults in each category and area in the relevant month."*

3.21 In general on the alleged breach by Mila of the PTA Decision no. 21/2014

3.21.1 GR opinion

It was stated that GR had communicated with Mila in connection with a request for access to fibre-optic local loops in Úlfarsárdalur. In the opinion of GR, the communication had shown that Mila did not operate in accordance with the obligations imposed on the company with the PTA Decision no. 21/2014. GR considered it important that care be taken in updating the Reference Offer in order to ensure that the PTA Decision was implemented and had the impact specified by the Decision on transparency and full non-discrimination, that is to say Equivalence of Input (EoI)

GR considered that the Reference Offer in no way accorded with the above specified PTA Decision and nor did it offer open access. In this connection one could indicate Articles 38, 669, 672 and 674 in Appendix A to the Decision. Article 38 contains, among other things a definition of local loop. There it says, among other things:

> *"... in the case of fibre-optic to the user, the last section in the fibre-optic system, for example from an exchange or from node points analogous to distribution frames."*

Article 669 states among other things:

> *In Mila fibre-optic local loop cables there are at least four optical threads for each apartment. The Mila system is designed to allow more than one service provider to provide service simultaneously.*

Article 672 states the following:

> *"Access to fibre-optic local loops can be divided into the following subgroups:*

- *<u>Access to fibre-optic local loops</u> Where one company uses the access, independent of the use of the local loop.*
- *<u>Shared fibre-optic cable</u> If more than one electronic communications company uses each thread in a fibre-optic cable then each thread is deemed to be a separate local loop. Mila is authorised to resolve the need for shared access with virtual networks through bitstream provided on fibre-optic local loop having obtained endorsement by the PTA in each instance."*

Article 674 then states:

> *"The PTA imposes the obligation on Míla to provide open access to the company's fibre-optic local loops. Access shall be provided from the technical space/node point in the optical distribution frame to the network connection point of the end user.*

GR therefore considered the existing Reference Offer to be contrary to the PTA Decision no. 21/2014 in question and requested that the PTA obtain an independent technical and economic assessment of whether unrelated parties could replicate the Mila product offer in accordance with the Decision.

In this instance it is important to keep in mind with respect to consumer interests, that efforts should be made to achieve streamlined transfer of electronic communications subscription between service providers. Efforts should furthermore be made to assure security in electronic communications. Visits to connection locations and to residences should be kept to a minimum when switching between service providers. A more economic and more secure solution would be to provide bitstream access instead of providing direct access to fibre-optic local loops, but however in such a way that it corresponded to the objectives that were presented in the above specified PTA Decision.

3.21.2 Mila's opinion

Mila rejected the unfounded assertions by GR that the company did not operate in accordance with the PTA Decision in question no. 21/2014 in connection with the GR request for access to three local loops in Úlfarsárdalur.

Mila then pointed out that the Equivalence of Input on Market 4 concerned the requirement that the wholesale section of a company or company group should not discriminate in any manner in the provision of access against retail departments of other companies, that is to say that access for related and unrelated parties operating on the retail market should be provided in precisely the same manner (including use of the same conditions, delivery times, quality and price). This was precisely the purpose of this Reference Offer, that is to say to present in a transparent manner the company's, conditions to all parties to the market, related and unrelated. The separation of wholesale and retail could thus not be clearer in the instance of Mila which was a limited company under a separate board whose directors were independent.

In addition to this, GR asserted that the Mila Reference Offer was contrary to the PTA Decision no. 21/2014. This is categorically rejected. In this instance GR appears to misunderstand the PTA definition of fibre-optic local loop in the Decision and its meaning. A fibre-optic local loop according to the Decision in question was the last section of a fibre-optic system where a whole and uninterrupted fibre-optic thread lay from the endpoint of an end user to a technical facility/connection point where an optical distribution frame was located. In this connection it should be pointed out that Mila decides the design of its network development and nowhere in the Decision was it prescribed that Mila had to locate optical distribution frames in street cabinets. It is clear that such an arrangement would be much more expensive to develop and in addition to this, it would be much more expensive to operate as one would have to send employees to the street cabinet each time that a customer switched between electronic communications companies.

3.21.3 The position of the PTA

There is a great lack of clarity in the above specified comments made by GR. GR maintains on the one hand that the Draft Reference Offer in question is not in accordance with the obligations that were imposed on Mila with the PTA Decision no. 21/2014. On the other hand it is maintained that it would be a more economic and more secure solution for Mila to provide bitstream access instead of providing direct access to the fibre-optic local loop.

The PTA reminds that in Section 3.1 here above, the Administration will propose that the concept “local loop” be defined in the following manner:

> ***Local loop:*** *“Physical electronic communications network infrastructure in a technology independent access network, including copper and fibre-optic lines, through which it is possible to provide electronic communications services and that are generally not shared between users. On the one hand there is the section which connects network connection points of users with the distribution frame in a telephone exchange in the case of copper wire and on the other hand, in the case of fibre-optic, the final section of the fibre-optic system to users, that is to say from an exchange or from node points.*

PTA Decision no. 21/2014 actually precisely allows for the possibility of resolving the need for shared access to the fibre-optic line with virtual networks over bitstream (VULA). The architecture of the Mila fibre-optic network is based on what is called a GPON solution. At many locations the optical distribution frame is not in a node point between a telephone exchange and the end user as is the case in the examples in Úlfarsárdalur mentioned by GR. It is impracticable to provide access to part of such a fibre-optic local loop or shared access to such a local loop as is the practice with copper local loops The PTA did not impose obligations on Mila on how the architecture of the company’s fibre-optic network should be structured. Although the Mila system architecture has not proven to be fully in accordance with the description given to the PTA by Mila in the period leading up to the market analysis which was concluded with the PTA Decision no. 21/2014, the type and structure of the system correspond mostly with the Mila description. The Mila description of system design does not create an obligation on Mila to consistently follow such descriptions as needs can arise with the development of new systems to deviate from the original plans.

As Mila has chosen to develop its fibre-optic access network using GPON, it is not possible for Mila to provide access to the local loop in such a manner that the party requesting access can be allocated “a dark fibre thread” for use on his own bitstream network from the telephone exchange or technical space, as optical splitters are not active equipment and are often located in rather small wells. One must therefore consider that the above specified, VULA solution, that is to say, open virtual access to be the most convenient in such instances. The access shall replicate to the extent possible a situation where the party requesting access is operating his own bitstream network.

Definition of markets is also developing in Europe and in the next market analysis of the local loop and bitstream markets which the PTA will make, these markets will be entwined as two sides of the same coin. This is because it is now recognised that physical access to fibre-optic local loops is subject to limitations.

VULA solution and bitstream solutions have been elaborated by Mila in the Reference Offer for bitstream access which is now being processed by the PTA in another case.

With the above in mind and having taken into account the amendments to the Mila Draft Reference Offer which have been dealt with here above, the PTA considers that the revised Reference Offer will fulfil the requirements made in the PTA Decision in question no. 21/2014.

GR also demands that the PTA obtain a technical and economic assessment of whether unrelated parties can replicate the Mila product offer in accordance with the PTA Decision in question no. 21/2014. The PTA considers that this demand is not directed at the elaboration of the Reference Offer in question. GR refers in this instance to a specific provision in the obligation for non-discrimination prescribed in the above specified Decision. The PTA does not consider it timely to make such an assessment. When the Mila Reference Offer for wholesale access to local loops and bitstream access has been endorsed by the PTA and when some experience has been gained from its implementation, the PTA may obtain such an investigation should there be reason to do so.

Finally, GR, considers that the PTA should endeavour to streamline switching procedures for electronic communication subscriptions between service providers and that in addition, the PTA should endeavour to assure security in electronic communications. The PTA considers the comments in question to be of a very general nature and is not aware of these issues having caused particular problems in their implementation. The PTA does not consider it appropriate to react specifically to these issues in connection with examination of this Reference Offer but will of course intervene if clear indications are received by the Administration to the effect that problems exist in such switching of service and/or in security in electronic communications.

3.22 In general on the alleged Mila breach of Paragraph 5 of Article 45 of the Media Act

3.22.1 GR opinion

In the GR comments it was stated that Article 45 of the Media Act dealt with the may carry right, that is to say the conditions that must exist for an electronic communications company to be able to demand that it be permitted to transmit TV broadcasts on a digital electronic communications network. The following was stated on transmission rules in the memorandum to the Bill for the Media Act no. 38/2011:

> *"The objective of transmission rules is to break up vertical ownership of material and distribution and it is therefore clear that there will be an incentive for individual media service providers to try to direct their customers to a related electronic communications company."*

This was dealt with in Paragraph 5 of Article 45 of the Act which is as follows

> *"Audiovisual media service providers may not direct their customers' business to an affiliated electronic communications network."*

Paragraph 5 of Article 45 prescribes a clear ban on a media service provider directing customers to a related electronic communications company. The provision was also intended to prevent "that a company or company group, which controlled both TV material and electronic communications networks, use its position to tie supply of material to specific electronic communications networks (vertical ownership)" as was said in the general comments to Section VII of the Media Act, which contains transmission rules.

GR pointed out that the content of the Reference Offer needed to prevent vertical ownership, having an impact on consumer choice on the electronic communications and media markets. There were recent examples on the Icelandic market where media material had been tied to specific electronic communications services. Among other things, reference was made to a recent dispute between Siminn and Vodafone.

3.22.2 Mila's opinion

Mila considered that this comment by GR on vertical access did not belong in consultation on the Mila Reference Offer to Market 4. According to clear provisions in the Siminn and Mila Settlement with the Competition Authority (CA) which was initially made in 2013, see CA Decision no. 6/2013, which was subsequently amended with CA Decision no. 6/2015, Mila operated on the wholesale market. Mila was neither a media service provider nor a distributor of TV material and had no involvement in commercial decisions made by such companies.

3.22.3 The position of the PTA

GR refers to a dispute between Siminn and Vodafone that the PTA has been processing and that concerns and alleged Siminn infringement of the ban provision in Paragraph 5 of Article 45 of the Media Act. In this provision it is prescribed that an audiovisual media service providers may not direct their customers' business to affiliated electronic communications networks. The provision is intended to break up vertical ownership of material and distribution. GR considered that the content of the Reference

Offer needed to prevent vertical ownership having an impact on consumer choice on the electronic communications and media markets.

The PTA considers that the comment in question does not belong in discussion on the Mila Reference Offer for wholesale access to local loops. The PTA has been resolving a dispute for resolution between Mila's parent company, Siminn and Vodafone concerning an alleged breach by Siminn of Paragraph 5 of Article 45 of the Media Act. The PTA has already made two Decisions in this case, that is to say PTA Decisions nos. 30/2015 and 3/2016. It could be that the PTA will make a further Decision in the case and in addition to this, a case between the parties is now being heard in the District Court of Reykjavík for confirmation of a ban which Siminn had gained on Vodafone, which banned the latter party from offering Siminn TV material in timeshift transmission. The dispute between Siminn and Vodafone must be resolved and Mila, which operates the core network, should not be involved in the case. Nor can the PTA see which provision in the Reference Offer in question could apply with respect to this matter.

Decision

The Post and Telecom Administration agrees that the new Mila ehf. Reference Offer for wholesale access to local loops, comes into force from the publication of this Decision, with those amendments prescribed in the Appendix to this Decision.

This Decision can be appealed to the Appellate Committee for Electronic Communications and Postal Affairs, see Article 13 of Act no. 69/2003 on the Post and Telecom Administration. The appeal shall have reached the Appellate Committee four weeks from the time that the party in question became aware of the Decision of the Post and Telecom Administration. Costs for an appeal are according to Paragraph 5 of Article 13 of the same Act, and in addition to this there is a special appeal charge to the amount of ISK 150,000, pursuant to Article 6 of Regulation no. 39/2009 on the Appellate Committee for Electronic Communications and Postal Affairs.

Reykjavik, xx June 2016

Hrafnkell V. Gíslason

Accompanying documents