

# Appendix II



POST AND TELECOM  
ADMINISTRATION  
IN ICELAND

## **Conclusions of the PTA consultation on the Decision with respect to cost analysis for bitstream access according to Access Options 1 and 3**

**23 July 2014**

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# 1 Introduction

This document contains an overview of the replies and comments received in the Post and Telecom Administration (PTA) consultation on the Decision with respect to cost analysis for bitstream access according to Access Options 1 and 3. The initial draft was presented to stakeholders for consultation on the Administration's website on 20 December 2013 and the consultation was thus concluded last 13 January.

The following parties submitted comments on the Preliminary Draft.

- IP-fjarskipti ehf. -Hereafter named Tal
- Gagnaveita Reykjavíkur ehf. - hereafter named GR
- Fjarskipti ehf. - hereafter named Vodafone

Comments are categorised by subject. Endeavours have been made to identify all significant comments and to answer them. At the end of each comment there is a short summary of the position of the PTA.

## **2 Cost analysis for Access Options 1 and 3**

### **2.1 Cost allocation**

**Tal** agreed with the Mila arguments in Section 7.1.3 that the cost of leased lines should be based on historical costs and not on PTA projections on future costs. In the opinion of Tal this is important because it is not known what this cost will be and it has been argued that future costs for VDSL will be lower than projected by the PTA. In addition to this TAL considers it important to be consistent and not to transfer ADSL costs to VDSL as ADSL service has not been made to carry a share of specifically identified costs for VDSL. In addition to this Tal considers that in the light of the principal of proportionality it is important to apply as exact methodologies as possible in each instance, as it is not normal that VDSL service should need to bear costs that do not relate to the service when it is possible to make a more precise split. Tal also points out that should there be future amendments to costs it would be possible to make a new cost analysis and then decide to increase the charge for Access Option 3 on the basis of established documentation. Tal reiterates that the company considers that pricing should be based on real costs and proposes that costs be reviewed at 12-months intervals. It is important that the PTA takes measures to ensure that the pricing of the above specified Access Options is never higher than their costs would justify.

#### **The position of the PTA**

As is stated in Section 7.2 in the consultation document, the PTA does not agree with the Mila comment that the Administration is using future costs and considers for this reason the Tal comment to be based on a misunderstanding. When calculating the cost of xDSL service, historical costs is used for the xDSL service within Mila/Siminn from the year 2012 and not a cost projection. The Mila comment with respect to data transmission (backhaul distance and core distance) hinges on the rule for division when allocating costs between VDSL and ADSL services. It was not the case that Mila/Siminn costs for backbone network had been allocated to VDSL service on the one hand and ADSL on the other (this would in any event have been difficult to implement) and for this reason the causal relationship between cost and varying xDSL services is not entirely clear. The allocation of costs between VDSL and ADSL services that Siminn/Mila proposed was based on a calculation rule and for this reason it is not possible to assert that this had been a true division of costs between these two service items. A large part of the costs were allocated to ADSL service on the basis of division of costs between the capital city area and the countryside and then on division of users according to location and type of service. When deciding the calculation formula for allocation of costs there are often many factors that could impact cost. The calculation formula in this instance did for example not take into account varying bandwidths of VDSL and ADSL services although it is likely that VDSL service will utilise bandwidth more than ADSL service. In cases such as this where the causal relationship between individual products/services and costs are not fully clear, it is a matter of judgement as to which formula is best suited in each instance.

When calculating costs for bitstream access the PTA considers that cost for data transfer should be allocated irrespective of whether it is for ADSL or VDSL service. The PTA considers that in reality it is a matter of development of bitstream system with xDSL technology in this instance, rather than being a case of two different technical solutions for bitstream transmission.

The PTA was also striving to create a level of predictability in pricing during the development phase of VDSL service. The proposed split would have created uncertainty in the price development for ADSL and VDSL as it depended on the number and location of users that in each instance used ADSL on the one hand and VDSL on the other.

Tal considers that pricing should be based on real costs and proposes that costs be reviewed at 12 monthly intervals. The PTA makes no comment to this as it is based on existing cost analysis of real costs. Furthermore the PTA proposes that the tariff should be reviewed annually from this point on, as was stated in the consultation document.

## **2.2 Monthly prices for access according to Access Options 1 and 3**

**Vodafone** considers that the price difference between Access Option 1 and Access Option 3 is too small. Either the cost for Access Option 1 is too high or the cost for Access Option 3 is too low.

The cost for Access Option 1 is ISK 912 according to cost analysis and was previously ISK 701. Vodafone requests information on the reasons for the increase and for the justification of the proposed price increase. Vodafone points out that it must be considered a rather unfortunate that the increase in question is introduced at the same point in time when interest is shown in the service.

### **The position of the PTA**

The cost difference for Access Options 1 and 3 is mostly based on the cost of the Mila backbone network which is included in Access Option 3 and not in Access Option 1. Vodafone presents no valid arguments for its view that the price difference between the Access Options is too small.

The explanation as to why the price per port (ADSL) for Access Option 1 increases from ISK 701 to ISK 912 is that on the one hand the price is grounded on the 2007 cost base and on the other hand on the cost base for 2012. The main explanation is an increase in local loop lease during the period and an increase in capex resulting from the collapse of the ISK.<sup>1</sup>

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<sup>1</sup> Local loop lease increased by about 21% between the years 2007 and 2013. The average Euro rate in 2007 was approximately ISK 88 while it was about ISK 161 in the year 2012. The consumer price index increased by about 45% during the same period.

**Vodafone** pointed out that in recent years where VDSL had been on offer, the price for VDSL was considerably lower than the price for ADSL. The reason for this according to explanations from Siminn was that costs were lower because VDSL was only available in the capital city area. As was mentioned by the PTA it was a condition pursuant to the PTA Decision no. 8/2008 that prices should be based on the average price for the whole country and not only for the capital city area. This conduct by Siminn of calculating on the basis of costs in the capital city area is therefore a breach of Decision no. 8/2008 and constitutes predatory pricing on a market which has had a significant impact on market development.

Vodafone requests that the PTA make a special scrutiny of this pricing by the company with the above in mind. Cost comparison should be particularly made between VDSL ports and ADSL ports. Why is the cost for VDSL ports higher than for ADSL ports? Vodafone considers it important that information this should be provided by Mila.

In the light of the PTA discussion on price increase of VDSL connections for Access Option 3 in Section 9.2.5, Vodafone considers it proper for it to be established whether VDSL connections for Access Option 3 have been subsidised during the period that the connections in question were not available for use by Vodafone. Vodafone therefore requests that the PTA examine thoroughly whether this happened during the period in question.

### **The position of the PTA**

With the PTA Decision no. 8/2008, prices shall be based on historical costs (real costs) with the addition of reasonable returns and the same prices shall apply where the service is on offer, at any location in the country. There is however no obligation to offer the service in question throughout the country.

Mila (previously Siminn) pricing of Access Option 3 in VDSL was based on costs allocated on the company's VDSL service in the distribution area where the service was offered, on the basis of historical real costs in accordance with the obligation to this effect.

The revised cost analysis for Mila VDSL service which is under discussion here is based on changed reality as the service is now offered in all of the country's main urban areas and with the real costs incurred by such an increased offer of this service.

One must furthermore keep in mind that the period of a number of years elapsed between the above specified cost analyses with attendant changes to cost criteria, quantity etc, and in addition to this development of the distribution of the VDSL system has brought about change in the cost structure.

With reference to the above the PTA considers the Vodafone assertion on predatory pricing to be ungrounded.

The cost difference between VDSL and ADSL ports according to Access Option 1 results from investment in DSLAM equipment. On the other hand the difference is not great and the more recent equipment is both ADSL and VDSL compatible.

At those locations where VDSL access according to Access Option 3 has been on offer, such access has been available to Vodafone in the same way as ADSL access. With respect to the Vodafone reference to the PTA text concerning the VDSL increase according to Access Option 3 compared with GR fibre-optic local loops, the PTA reiterates that the price increase is based on changed criteria for the cost analysis and not on a correction of alleged predatory pricing.

## 2.3 Multicast and VoIP

**Vodafone** comments that it is not possible to activate VoIP and multicast services on the DSL connections purchased on Access Option 3 in the same manner as on Access Option 1. Vodafone requests from the PTA that this be rectified and that the price for VoIP and multicast be published for such service through Access Option 3.

### The position of the PTA

The Mila (previously Siminn) cost analysis here under discussion on the wholesale switches follows in the wake of Decision no. 38/2012 which prescribed the use of wholesale switches and relevant charges, and in addition to this it decided access prices for Access Option 1 in xDSL, including VDSL with multicast and VoIP possibilities at cost analysed prices. With respect to activating VoIP and multicast access for Access Option 3, this is not under discussion in the cost analysis here being dealt with.

The PTA has conducted market analysis on Market 5 and national consultation on that analysis is completed. The final PTA Decision in that market can be expected concurrently with the PTA final Decision on the matter here under discussion in the spring of 2014. It is planned to embark on a comprehensive cost analysis of Mila xDSL bitstream service subsequent to the above specified market analysis and that the cost analysis will also take VoIP and multicast service into account in accordance with imposed obligations. This analysis shall be completed by Mila no later than 6 months after the publication of the planned PTA Decision. The PTA will subsequently scrutinise the cost analysis, initiate national consultation and consultation with ESA and make necessary amendments before new prices come into force. One can expect a final Decision on this cost analysis in the first quarter of 2015.

If the PTA would have extended this cost analysis to cover all possible services provided in market 5, the Decision would have been delayed for several months. This would in turn have delayed the settlement (re-calculation) of the temporary prices set by PTA's Decision no. 38/2012 which would be disadvantageous for Vodafone and Mila; and might increase the likelihood of a bill-shock.

**Vodafone** objects to cost for multicast service being split between the number of DSLAM and bandwidth for multicast. Vodafone believes that it would be better if costs were split between each user as is the case with VoIP costs.

In the opinion of Vodafone it is more appropriate to have the same cost model for both services. Vodafone considers the cost model for multicast to be very unclear in this manner and that it will be conducive to causing significant problems in providing the service. Vodafone therefore proposes that charges should be collected for each

user and not for each Mb/s for multicast services. Such a method would return a lower level of complexity and a simpler wholesale and retail model.

### **The position of the PTA**

In the calculation of fees for the multicast, the bandwidth required for the service is taken into account which is in accordance with the nature of the multicast service. In response to Vodafone's comments, Mila has prepared more detailed accounts of how the bandwidth required for the multicast is calculated, as described further later in this chapter. **Vodafone** considers it to be unclear as to how one should determine the number of DSLAM equipment items for which a charge is to be collected. Vodafone and other companies are possibly only using a fraction of the installed DSLAM equipment units in each relevant telephone exchange area which means that it can be extremely difficult to establish what the real costs for those electronic communications companies should be. Vodafone does not have access inside telephone exchanges and can therefore not gather information on the number of DSLAM equipment units in each telephone exchange. This means that Vodafone can never assess the justification for invoices for the service in question.

### **The position of the PTA**

Mila registration of where Vodafone customers are connected is available at any given time and the PTA emphasises that the company should have transparency and traceability as guiding principles when making invoices to service providers in each instance. Should fault come to light in invoicing then the PTA will react in the appropriate manner.

In response to Vodafone's comments, Mila has prepared more detailed accounts of how the bandwidth required for the multicast is calculated, as described further later in this chapter.

**Vodafone** considers that the proportional use of xDSL ports in each telephone exchange does not reflect proportional costs of the companies. Vodafone supports this view by taking the example of the arrangement at Múlastöð.

The Vodafone example allows for 1000 users on Siminn systems and 100 on Vodafone systems, IP-DSLAM are 20 in number in the telephone exchange and Siminn multicast into the wholesale switches is 500 Mb/s and 400 Mb/s for Vodafone. The total Siminn cost is thus ISK 136,300 which is ISK 136 per user while the total cost to Vodafone would be ISK 109,040 which is ISK 1,090 per user.

Vodafone considers it extremely unfair to collect costs in the manner proposed in the cost analysis.

Vodafone cannot see that direct cost is incurred with the use of multicast service in excess of what is already paid for in monthly charges for each port. Siminn has nowhere explained this cost nor provided arguments to justify it. It is clear that the arrangement proposed by Siminn is significantly to the disadvantage of Vodafone and is not conducive to creating non-discrimination between parties on the market.

Vodafone considers that transparency would be ensured with an arrangement where each port carried cost for multicast service and for this reason Vodafone emphasises that the PTA should gather more detailed information on the planned charges for multicast. The conclusion that this would provide gives a very clear picture of how and to what extent Siminn has planned to collect revenue for this service.

The arguments for costs being per DSLAM do not apply in the opinion of Vodafone as the traffic coming in to the wholesale switches can only be a maximum of the same traffic as comes from wholesale switches to DSLAM. For this reason Vodafone cannot see that the number of DSLAM is significant for the cost calculation for multicast.

Vodafone wonders whether the PTA has considered that with this arrangement wholesale switches have an income from multicast to the amount of ISK 200,000 per month - apart from the fact that payment is made for each port in operation. Is this something that the PTA considers justifiable?

### **The position of the PTA**

In response to Vodafone's comments, Mila has prepared a more detailed account of how the bandwidth required for the multicast is calculated and the example Vodafone has taken does therefore not apply.

In its calculations, Mila estimates the number of set-top boxes (STB) on the basis of the number of users of the broadband service for each operator. The required bandwidth is then estimated at each DSLAM, based on the number of STB's (estimated from the number of users).

The following table show the estimated bandwidth required for a given number of STB's:

<b>Number of STB's</b>	<b>Bandwidth Mb/s</b>
1 - 9	50
10 - 29	130
30 - 49	160
50 - 99	240
100 - 199	360
200 - 399	560
400 -	600

When calculating monthly charges for the multicast the bandwidth is estimated on the basis of the above table for each operator. From that the number of DSLAM's connected for each range of bandwidth is found for each operator (i.e. number of DSLAM's with 50 Mb/s, number of DSLAM's with 130 Mb/s, etc.) and then the number of DSLAM's is multiplied with the bandwidth and the unit price (ISK 13.63) for each operator.

PTA accepts Mila's proposals for the methodology of calculating the multicast charges for the time being. As stated above, it is planned to embark on a comprehensive cost analysis of Mila xDSL bitstream service subsequent to the market analysis now in process on market 5. PTA will then re-address this methodology on the basis of experience gained in the meantime.

It is clear that when distributing content using multicast technology, economy of scale can be achieved because of the nature of this technology. The number of channels broadcasted affects the maximum bandwidth required and when the operator is using the maximum bandwidth no extra bandwidth cost is occurred with each additional user. Furthermore, when two users (at the same DSLAM) are watching the same channel then there is transmitted only one data stream for this channel and hence the bandwidth does not increase in direct proportion to the number of users.

Mila has provided PTA with calculations of the monthly fee chargeable to Siminn and Vodafone according to the above methodology. From these calculations it is clear that Siminn will enjoy some economy of scale with lower cost per user. It is however far from being the difference between the companies as Vodafone presented in their calculation, where Vodafone has estimated their per user cost would be eightfold the cost at Siminn.

**Vodafone** requests that the PTA acquaint itself with how Siminn multicast has been collected during the last 7 years, which is to say during the same period that other electronic communications companies have been subscribers to the Internet and have supported costs for the Internet. Cost analysis for the charge in question should clearly be available. Vodafone sees no reason why those prices should not be made public.

### **The position of the PTA**

The PTA plans to examine the above specified issues mentioned by Vodafone in the companies above specified comments in the above specified overall review of the Mila tariff for bitstream access which will be implemented this coming winter. There is however no justification to deal with this matter in the cost analysis here under discussion.

**Vodafone** points out that it is not specified in the tariff for VoIP service through Access Option 1, what bandwidth is being referred to. It is important that such information is provided in the tariff along with whether QoS is included in the price. Vodafone considers it very important that QoS product is included in the service in question.

Vodafone points out that additional services are not offered in the cost analysis such as VLAN or QoS setup. It is important that all parties are offered the same possibilities with respect to these services.

Vodafone requested information about costs for these items with queries to Siminn but these queries have not been answered.

### **The position of the PTA**

It is clear that the necessary bandwidth for VoIP service is proportionately very small while on the other hand such service makes priority requirements for quality (QoS).

As has been stated above the cost analysis in question is not a comprehensive analysis of all factors related to bitstream access but rather the services that are by far of the greatest significance and that the PTA Decision no. 38/2012 directly concerns. This particularly applies to derived services such as IP TV and VoIP. As has been previously stated it is planned to cover the service items mentioned by Vodafone in more detail in the planned cost analysis of Market 5.

As stated here above, if the PTA would have extended this cost analysis to cover all possible services provided in market 5, the Decision would have been delayed for several months. This would in turn have delayed the settlement (re-calculation) of the temporary prices set by PTA's Decision no. 38/2012 which would be disadvantageous for Vodafone and Mila; and might increase the likelihood of a bill-shock.

The PTA furthermore points out that it could be necessary for Vodafone to forward to Mila, its previously sent queries to Siminn.

### **2.4 Other comments**

**Vodafone** refers to Section 9.2.1 in the cost analysis where it was stated that Mila would collect a setup fee for local loops with new connections and also would collect an alteration charge for changes from ADSL to VDSL in Access Options 1 and 3. The charge shall be ISK 3,166.

Vodafone points out that such a charge has never been collected for Access Option 3. Vodafone requests an explanation of this change in arrangement and information on which instances justify the imposition of the charge in question in excess of those that previously applied. The changes in question cannot be considered other than a significant increase for the service in question and it is clear that reactions to such increases are inevitably that they will be passed on in pricing to the disadvantage of customers on the electronic communications companies.

The cost of changing from Siminn VDSL service over to Vodafone or to another electronic communications company does not in the opinion of Vodafone constitute the same cost as opening a new connection. Change of VDSL service constitutes a simple system operation which is an entirely different nature to opening a new connection.

### **The position of the PTA**

The PTA submitted this Vodafone comment to Mila. In the Mila reply it states:

"Change from ADSL to VDSL:

*xDSL service pays copper local loop ISK 3,166 for each connection into street cabinets. If an electronic communications company requests transferred to VDSL a*

*setup fee is collected. The fee is then collected through the xDSL service. When an electronic communications company requests transfer the setup fee is collected as the service has paid this to the access unit (copper local loop) which handles connection in the street cabinet. Mila considers it appropriate to collect this charge so that the service will cover costs.*

*On the other hand Mila can accept that should a customer order ADSL through VDSL compatible equipment and furthermore notifies that he wishes to alter the service to VDSL within 60 days then a setup fee will not be collected for the change.*

### ***Taking over xDSL service***

*With respect to taking over xDSL service (switching service providers) there is no need for changes in the distribution frame. In such instances Mila can accept the collection of a lower charge. There is however management and registration within systems and it is normal to pay for that. In the analysis sent by Mila to the PTA in 2011 it was shown that this part of the work was ISK 1,329. Mila proposes that the charge for this service will be ISK 1,329 instead of ISK 3,166 as the work is comparable.*

*The reason why Siminn did not collect a setup fee for Access Option 3 is simply accidental failure to include this cost in the analysis."*

Setup and alteration charges will be reviewed in the cost analysis which is planned for the coming winter subsequent to the PTA Decision on Markets 4-5. These are setup fees for local loops with new connections, for the taking over of xDSL service and for changes from ADSL to VDSL in Access Options 1 and 3.

Until the results of that cost analysis are available the existing charge of ISK 3,166 will apply to changes from ADSL to VDSL and this charge is in accordance with the PTA Decision no. 30/2011. The PTA accepts the Mila proposal that the charge for taking over xDSL service will be ISK 1,329 until the new cost analysis is available.

**Vodafone** points out that it is not aware of Mila having provided the unit prices mentioned in Section 7.1.1.1 4 "Access and MDF". There it is stated that the prices are calculated on the basis of the Mila tariff. Vodafone therefore considers it unlikely that Siminn would have been able to use these prices when making a tariff for the service. If such information had been provided to Siminn without other parties to the market being informed then this must be seen as discrimination between companies on the market which is in breach of the non-discrimination principle on the electronic communications market.

### **The position of the PTA**

In the Mila reference offer for open access to local loops, Appendix 1 a, Section 7 "tariff" prices for access to local loops in street cabinets are published (item. 7.4)<sup>2</sup>. In the Mila reference offer for leased lines, Appendix 2b, Section 1 "tariff" prices for fibre-optic lines in street cabinets are published (item. 1.5)<sup>3</sup>.

**Vodafone** comments on the following sentence in the cost analysis concerning Access Option 3 to the effect that electronic communication companies have been able to connect directly with Mila BRAS:

*"After transmission with ATM/IP on the Mila backbone network to the connection point of another electronic communications company with the Mila BRAS."*

Such a service is never been on offer to Vodafone and the company has not been informed of this. Vodafone considers that such a service could possibly be useful for the company. If in reality it is possible to connect directly then Vodafone requests information on where such connections are possible and how one can access this service.

### **The position of the PTA**

In the Decision of the PTA no. 8/2008 it states i.a. about Access Option 3:

*"After transmission with ATM/IP on the Siminn backbone network<sup>4</sup> to the connection point of another electronic communications company with the previously mentioned network. (Option 3)".*

The Mila tariff states about Access Option 3:

*"After transmission with ATM/IP on the Mila backbone network to the connection point of another electronic communications company with the Siminn BRAS."*

In addition the following is stated in the Mila tariff:

*"With Access Option 3 it can be necessary to set up additional equipment for connection with BRAS. Such equipment is not included in the monthly charge according to the tariff in article 1.1. In addition to the above specified cost, the counterparty bears the cost of connection with BRAS. Bandwidth and core network are shared with other services and thus not guaranteed."*

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[http://mila.is/servlet/file/Vi%C3%83%C2%B0auki+1a+1.a%C3%8C%C2%81g.2013b.pdf?ITEM\\_ENT\\_ID=20845&COLLSPEC\\_ENT\\_ID=2](http://mila.is/servlet/file/Vi%C3%83%C2%B0auki+1a+1.a%C3%8C%C2%81g.2013b.pdf?ITEM_ENT_ID=20845&COLLSPEC_ENT_ID=2)

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[http://mila.is/servlet/file/Leiguli%C3%8C%C2%81nur\\_vi%C3%83%C2%B0auki\\_2b\\_230114.pdf?ITEM\\_ENT\\_ID=20851&COLLSPEC\\_ENT\\_ID=2](http://mila.is/servlet/file/Leiguli%C3%8C%C2%81nur_vi%C3%83%C2%B0auki_2b_230114.pdf?ITEM_ENT_ID=20851&COLLSPEC_ENT_ID=2)

<sup>4</sup> The obligation has now been transferred to Mila subsequent to the Mila takeover of the Siminn bitstream system in accordance with the settlement between Skipti and the Competition Authority.

It cannot be concluded otherwise from the above than that Vodafone is being offered to connect directly into the Siminn BRAS should the company so request and to pay an additional costs for this should this be the case. In the PTA draft the wording was "Mila BRAS" while the reality is that BRAS was not transferred to Mila when bitstream service was transferred to Mila subsequent to the Settlement, but rather it accompanied Siminn IP-MPLS service.

**Vodafone** refers to a sub-paragraph in the cost analysis and considers that it constitutes notification of the Decision on price increase for telephone at fixed location. An increase for fixed line telephone is being notified here, from ISK 959 to ISK 1,386 - but there is no further discussion on the increase. Vodafone considers it important that the increase in question is dealt with clearly and justified in detail.

### **The position of the PTA**

The PTA assumes that Vodafone is referring to the sub-paragraph on page 48 in the Draft where the PTA refers to the Mila tariff for local loop leasing when solely the lower frequency range is used. The text of the sub-paragraph is not correct and the PTA will make the appropriate correction to the text. It is emphasised that the sub-paragraph does not constitute a notification of an increase in the Mila lease price for the lower frequency range of local loop from ISK 959 to ISK 1,368 as Vodafone concludes as a decision on the tariff for local loops is not under discussion in this cost analysis.

**Vodafone** points out that in discussion on the main rules of cost analysis methodology, Section 9.2.9, those costs that can be incurred by electronic communications companies are not covered that would result from for example if Hringdu decided to purchase Access Option 3 from Mila and IPTV or VoIP from other electronic communications companies. Vodafone considers it important that all such costs incurred by those electronic communications companies are specified in the cost analysis. Such information is extremely important for decisions by electronic communications companies with respect to the provision of such service.

### **The position of the PTA**

As has been stated the cost analysis in question is not a comprehensive analysis of all factors related to bitstream access but rather of the services that have by far the greatest significance and that the PTA Decision no. 38/2012 directly concerns. This particularly applies to derived services such as IP TV and VoIP.

In Section 9.2.9 there is discussion on the main principles that shall apply in the next review of the cost analysis of the Mila service on Market 5. It is planned to examine these issues in greater detail in the cost analysis that is planned for Market 5 and the PTA will consider the Vodafone comments when this work commences.

If the PTA would have extended this cost analysis to cover all possible services provided in market 5, the Decision would have been delayed for several months. This would in turn have delayed the settlement (re-calculation) of the temporary prices set by PTA's Decision no. 38/2012 which would be disadvantageous for Vodafone and Mila; and might increase the likelihood of a bill-shock.

**Vodafone** requests that information be provided on the prices for SHDSL and GPON services in the cost analysis.

### **The position of the PTA**

Costs for SHDSL and GPON connections are kept separate from costs for other services in the cost analysis but the unit prices were not calculated in this instance as the main emphasis was placed on the services directly affected by the PTA Decision no. 38/2012. One must keep in mind that there is no price control obligation on Mila GPON services and PTA does not control Mila's tariff for that service. It is however clear that the price for SHDSL connections will be reviewed in accordance with the planned PTA Decision on price control of xDSL connections on Market 5.

## **3 Wholesale switches**

### **3.1 Division of costs**

**Vodafone** states that in the PTA Decision no. 38/2012 on Access Option 1 where it is stated that costs for wholesale switches were split between the companies in such a manner that Siminn participated in the costs with Vodafone.

It is clear in the opinion of Vodafone that subsequent to the Settlement between Skipti and the Competition Authority, there are 3 parties that use wholesale switches from 1 September 2013, that is to say Siminn, Mila and Vodafone. The cost of the wholesale switches should have been paid proportionately by the number of parties that utilise wholesale switches. Vodafone points out that despite the fact that a new party has begun to use the service in question, the company has not been aware that the monthly charge for capex and opex has been reduced.

The setup fee for wholesale switches is conceived on the basis of two parties and is ISK 220,000 per party. In the opinion of Vodafone the setup fee should be ISK 146,700 for each party in the light of the fact that the parties use the wholesale switches.

### **The position of the PTA**

In the light of the information received in the national consultation, the PTA has altered the calculation of set-up fee for wholesale switches and this alteration was submitted in the additional consultation. With respect to the number of parties using wholesale switches, the PTA sent a query to Mila subsequent to the Vodafone comments. In the Mila response it is stated that only two parties use the switches for Access Option 1. As the IP/M PLS network was not transferred to Mila, Mila customers in Access Option 3 go through Siminn connections.

**Vodafone** considers it necessary to clarify the provisions of services for which use of wholesale switches is authorised. The PTA Decision no. 38/2012 covers the dispute between Vodafone and Siminn on the provision of Access Option 1 and there is an agreement between the companies to use wholesale switches for the provision of such service. Wholesale switches become part of delivery of Access Option 1 and are not intended for other services. For this reason the whole approach with respect to

proportional reduction of costs is related to new parties that use the service in question, such as Access Option 1, and not to the total use of wholesale switches. Subsequent to local inspections of telephone exchanges, Vodafone suspects that companies in the Skipti group are using wholesale switches to provide service other than Access Option 1. Vodafone requests that the PTA investigate whether this is the case.

Should it prove to be the case that companies in the Skipti group are using wholesale switches to provide other services then there are two issues that must be examined in the opinion of Vodafone. On the one hand that Vodafone has not been notified about the services where it is possible to use wholesale switches and on the other hand that division of costs should not be made according to the number of parties that use Access Option 1 but according to the total use of switches.

### **The position of the PTA**

The PTA agrees that wholesale switches were only planned for Access Option 1, see PTA Decision no. 38/2012.

Information then available to the PTA indicated that wholesale switches were only used in Access Option 1.

Following the Vodafone comments the PTA specifically sought confirmation from Mila on how wholesale switches were used with respect to services other than according to Access Option 1. It came to light that the wholesale switches are used for more than for connections for Access Option 1. Mila confirmed that the company's cost analysis from the autumn of 2013 had not been based on correct premises as the number of connections had not been correct, company connections had not been included in the list showing the number of connections. This would be corporate connections with Siminn, connections with Siminn mobile phone transmitters and backbone connections with Siminn IP network.

Subsequent to the new information received in the national consultation the monthly charges for wholesale switches were recalculated and the conclusion is published in the additional consultation, see Appendix III. The conclusions of the additional consultation will be published in Appendix IV.

It should be noted that the PTA is handling a case which relates to the Mila request for PTA endorsement for amendments to the companies reference offer for bitstream access where the above specified augmented possibilities for use of wholesale switches are included. National consultation has taken place on this matter and a final decision is expected, subsequent to consultation with ESA, shortly after the Decision in the matter here under discussion and the Decision on markets 4 and 5. While the matter is being examined by the PTA, Mila is recommended not to provide Siminn with further connections for use other than Access Option 1. The same applies to other parties.

**Vodafone** points out that in the cost analysis it is stated that for each port in excess of one the PTA proposed that the equivalence would be 30% of the first port such that equivalence of one Gb/s ports in excess of one would be 0.3 while the equivalence of

10 Gb/s ports in excess of one would be 0.48. Vodafone proposes that before calculation rules with respect to the number of ports are decided, the following questions need to be answered: "Under what circumstances can ports be more than one?" Each port can either be used as a connection with DSLAM or with Access Option 1. Vodafone does not see how ports can be more than one.

Vodafone objects to the arrangement proposed by the companies in the Skipti group for the cost of ports in excess of 1. Vodafone points out that the method "is tailor made to the needs" of Siminn as they will connect to more than one port, for example where Siminn foresees that it will have direct corporate connections to fibre-optic or transmitter connections. The arrangement with respect to lower cost with each port is thus conceived in such a manner that the cost paid by Vodafone or other electronic communications companies is in reality subsidising access equipment for Siminn.

It came as a great surprise to Vodafone that the wholesale switch should be used in this manner and not solely for the parties that planned to use Access Option 1, as Decision no. 38/2012 appears to assume, but also for direct connections to each DSLAM. Vodafone points out that the DSLAM would be serial connected if it were not for the wholesale switch. Vodafone therefore wonders whether the wholesale switch is now an integral part of the access solution. If this is the conclusion then the PTA needs to view the cost analysis from this angle.

### **The position of the PTA**

In accordance with the planned PTA Decision which was published in the additional consultation, monthly charges for additional ports will be priced at the same price as the first port, see further discussion in Appendices III and IV.

**Vodafone** requests information on the arrangement when the first report is 1 Gb/s and the latter is 10 Gb/s, with respect to the calculation rule for ports, where they are more than one.

Vodafone also requests information on why the operation charge for each port subsequent to the first port is 30% lower as Vodafone must according to the cost analysis pay for installation, finishing and set up of the first port. As the start-up costs has been paid, which should justify a higher operational charge, Vodafone does not see the reason for a higher operational charge. A higher operational charge could possibly be justified if the set-up costs in question were included in the monthly price.

### **The position of the PTA**

In accordance with the planned PTA Decision which was published in the additional consultation, monthly charges for additional ports will be priced at the same price as the first port. The monthly price is calculated on the basis of capex and opex of the wholesale switches, based on current use of the wholesale switches.

**Vodafone** considers that the structure for the cost of installation of wholesale switches when an agreement cannot be reached on the timing of the installation, is not justifiable. Then each party individually must pay for installation, billed labour and expended costs. On a number of occasions Mila has informed Vodafone about

planned installation of a xDSL system at locations where Vodafone does not have a backbone connection. Vodafone thus had no possibility of using the service in question. Vodafone would therefore not participate in those costs at that point in time and would at a later point in time, when the company could make use of the service, need to pay that cost. It would be more justifiable in the opinion of Vodafone if the company would pay proportionately in accordance with other provisions in the cost analysis.

### **The position of the PTA**

The set-up fee is calculated on the basis that the wholesale switch is installed and connected for all parties at the same time. If this were not the case then the setup fee would increase. It is for this reason that there could be additional costs if agreement is not reached on installation.

It is not necessary to install a wholesale switch unless a party requests a connection according to Access Option 1 at the location in question and only if it is clear that there is a need for such a switch for technical reasons in the opinion of Mila. The PTA assumes that Vodafone would not request a connection unless the company planned to use the connection within a reasonable period of time otherwise the situation could arise where a wholesale switch was installed unnecessarily.

## **3.2 The cost of wholesale switches as part of access prices according to Access Option 1**

Vodafone proposes that the PTA include the cost of wholesale switches in the cost model for Access Option 1 in this cost analysis instead of this being done in the next review of the cost analysis for bitstream access. Vodafone considers that such an arrangement would harmonise better with what already exists on the market. It is the opinion of Vodafone that Mila should deliver certain services but that the methodology chosen should be entirely in Mila's hands. Mila shall price such a service and the company shall take cost into account in monthly prices. In support of this Vodafone points out that when delivering Access Option 3, wholesale switches were used and the costs for these wholesale switches was included in the monthly charge for that service.

### **The position of the PTA**

The main reason for the main components of the tariff of bitstream access being reviewed or priced for the first time in this cost analysis is the PTA Decision no. 38/2012. Among other things the Decision prescribes cost analysis of start-up costs and of capex and opex and it prescribes that a new tariff be decided on that basis for wholesale switches and for access prices that should apply from and including 1 February 2013. The new tariff should among other things be used in the settlement of transactions between Siminn (now Mila) and Vodafone. On this basis and on the basis of uncertainty about the development of use of wholesale switches, the PTA considers it unwarranted to change the structure of the tariff at this stage, but rather to work towards changes, which Vodafone considers positive, in the next cost analysis.

The PTA points out that costs for wholesale switches have not been included in the price for bitstream access according to Access Option 3.

The PTA will in the next cost analysis specifically examine the interaction between wholesale switches and Access Options 1-3 when assessing the allocation of costs to specific services.

## **4 Comparison with analogous service**

**GR** does not accept the PTA assertion that the change presented by the PTA to Access Option 1 cannot influence or hinder further development of access through fibre-optic local loops. GR mentions that if the cost for all operations and investments is not properly reckoned then this can lead to under-pricing of service which could inhibit further investment by competitors in next generation access networks.

The PTA has compared the new Mila bitstream prices with the GR tariff for bitstream access through fibre-optic local loops. It was not stated precisely what was being compared as pricing structures of Mila and GR are different and the prices that appear in tariffs are not comparable without taking into account the service in question.

GR requests that this conclusion be reviewed. Should this not be accepted then GR requests that the Administration provide arguments for this assertion in the final document.

### **The position of the PTA**

GR refers to the change that the PTA conclusion will bring about and expresses its concern that the cost of all operations and investments are not properly reckoned which could lead to under-pricing in Access Option 1. VDSL service according to Access Option 1, fell in price from the temporary prices that were published in January 2013 and it is appropriate to point out that these were temporary prices and thus clear that they could be subject to certain changes.

The cost model used by the PTA for the Decision on access prices pursuant to Access Options 1 and 3 is based on data from Mila/Siminn bookkeeping and all opex and capex are taken into account. The PTA conclusion is based on the assumption that the bookkeeping data are correct but should something to the contrary come to light the PTA reserves the right to alter the conclusion. The temporary prices that were published in January 2013 were based on the same basic data and the reduction on the temporary price for VDSL service according to Access Option 1 can mostly be explained by correction and amendments to the allocation of costs in the cost model that the PTA considered necessary to make. It should be noted in this connection that the PTA is obliged to take into account that the only cost which should be recovered is that which is incurred in economical operations. After these changes the difference between the cost of VDSL and ADSL services was very small and for this reason the PTA agreed to have the same price for VDSL and ADSL service according to Access Option 1.

In Access Option 3, service items<sup>5</sup> are added along with attendant costs. As the PTA mentions in Section 9.2.5 in the draft, VDSL access according to Option 3 is such that it is considered almost comparable with access provided by GR, though it is not a comparable service in all respects. For these reasons the PTA chose to compare the price on Access Option 3 with the GR access charge which each user pays. On the other hand this comparison can never be precise as electronic communications companies also pay a charge to GR which varies according to the service purchased and to the terms enjoyed by each electronic communications company with GR. There are more factors that make this comparison difficult because this is not exactly the same service. In the opinion of the PTA this comparison does however not indicate that the conclusion from the Mila/Siminn cost model based on bookkeeping data, gives an access price that is either far too high or far too low.

The price for bitstream access according to Option 3 is ISK 1,367 according to the conclusion from the cost analysis and it includes access to the upper frequency range of the copper local loop. By comparison ISK 2,080 ex VAT access charge is paid for bitstream through the GR fibre-optic which the user pays directly to GR in addition to cost for bitstream service which is provided through fibre-optic and paid to GR by electronic communications companies (included in bitstream service that the user pays electronic communications companies). If one only considers bitstream service then the GR price is higher than the price for bitstream access according to Access Option 3. The GR access charge however constitutes among other things the possibility of VoIP service while users that purchase VDSL bitstream service need to pay ISK 1,042 for access to the lower frequency range if it is not used for fixed line telephone on the local loop in question. If this is taken into account then the access price for VDSL service along with the lower frequency range totals ISK 2,409. When the lower frequency range has been added the prices are close to being comparable but this depends on the costs that electronic communications companies pay for the service provided through the fibre-optic. There are many factors that make this comparison difficult but in the opinion of the PTA it is possible to conclude that this comparison indicates that the conclusion of the cost analysis is in accordance with the service offered by GR.

## 5 Comparison between wholesale and retail prices

**GR** considers that the price comparison presented in figure 9.3 does not give a true picture of comparison of pricing of services by fibre-optic and by VDSL. There the Mila local loop charge and the GR access charge or that of other operators of fibre-optic networks are excluded. These charges are not for comparable services and are for this reason not comparable. The PTA should therefore present the price comparison in another manner as it does not give a realistic picture of prices paid by consumers.

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<sup>5</sup> See Section 7.1.3 in the PTA draft.

### **The position of the PTA**

The illustration in question shows retail price on the consumer market for Internet service through varying access networks, ADSL, VDSL and fibre-optic, with varying included data quantities. The illustration is first and foremost intended to demonstrate that the retail price of such service mainly depends on the amount of included data in the monthly charge for the service. The capacity of the connection or the underlying technology does not have a deciding impact on pricing to consumers.

On the other hand it also shows that Internet connections through fibre-optic are often slightly less expensive than connections through ADSL or VDSL, given a similar quantity of included data.

The illustration also shows that smaller companies generally offer lower prices than the larger players on the consumer market, despite greater economy of scale of the latter. This indicates latitude for competition in pricing on the consumer market.

The access charge like the one collected by GR opens the possibility for fixed line telephone, Internet service and TV service. It does not give a true picture in price comparison of service options to allocate the access charge all to one service, for example to Internet service. It is also not clear how it would be best to split the access charge between each service as some consumers use only one of these three service items, others used two and some use all three.

The Mila access charge, that is local loop lease, is divided on the one hand into the upper frequency range and on the other the lower frequency range. In the case of ADSL and VDSL connections the cost of the service provider for the upper frequency range is included in the retail price, like the charge collected by GR from service providers for Internet service. Mila local loop leasing for the lower frequency range which Mila collects from the service provider of fixed line telephone service is either included in the retail price as an unbundled part of the monthly charge for fixed line telephone service or it appears as a special line charge on the invoice for fixed line telephone service.

It is only in instances where a customer is not purchasing fixed line telephone service that Mila collects fully unbundled local loop lease from the service provider of xDSL service and such a party then invoices his customer for the lower frequency range as "number free DSL" (naked DSL) line charge or under some other name in the company's tariff.

The purpose of the illustration is explained here above. It shows the prices presented to consumers as the price for Internet service. Its purpose is not to demonstrate total cost for consumers. There are clear reservations and a detailed explanation in the text of the preliminary draft. The PTA considers there to be no reason to alter the illustration but it will present reservations with respect to the illustration more clearly because of the GR comments.