



PÓST- OG FJARSKIPTASTOFNUN

Draft Decision

**Review of the Míla wholesale tariff for terminating
segments of leased lines
(Market 6/2008)**

27 April 2017

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1 Introduction

The Mila ehf. tariff for terminating segments of leased lines here under discussion is based on those obligations imposed on the company with the Decision of the Post and Telecom Administration (PTA) no. 8/2014 dated 6 May 2014.

The products covered by the Mila tariff belong to the wholesale market for terminating segments of leased lines which is Market 6 pursuant to the EFTA Surveillance Authority (ESA)¹ Recommendation from 2008. This concerns terminating segments of leased lines based on copper local loops and in particular, Ethernet over copper (EoC) and digital leased lines up to 2 Mb/s which use SHDSL technology (SHDSL leased lines). The planned PTA Decision is based on the Mila initial cost analysis for terminating segment of leased lines submitted by Mila on 30 April 2015 according the latest revision dated 17 March 2017 in accordance with the requirements of the Authority.

The PTA opened a national consultation on the preliminary draft Decision on 26 April 2016 and the consultation ran until 16 May 2016. This preliminary draft was based on the Mila initial cost analysis as revised on 21 January 2016. PTA did not receive any comments from the operators during the consultation.

Concurrent to the PTA review of cost analysis on market 6/2008, PTA reviewed Mila proposed tariffs based on cost analysis for copper local loop (market 4/2008) and bitstream access (market 5/2008). Because of the interdependence of these tariffs it is necessary that they enter into force at the same time. The PTA will therefore publish the Decisions on the review of these tariffs at the same time.

PTA examined the cost models and Mila's tariff structures in these three markets (4/2008, 5/2008 and 6/2008). Furthermore, stakeholders have had an opportunity to comment on the methodologies used to calculate the prices and the tariff structures. However, as the initial cost models used costing information from 2014 the PTA requested that Mila would upgrade the cost models in these markets with costing data from the 2016 financial year.

In accordance with the PTA request, Mila submitted an updated cost model which is now based on 2016 cost data. The calculated prices for terminating segments of leased lines are based on operating figures for the financial year 2016.

The PTA opened an additional national consultation on the revised draft Decision with the result of the cost model updated with 2016 data. The consultation ran from 31 March until 19 April 2017. The PTA did not receive any comments from the stakeholders during this consultation.

The following Sections cover the facts of the procedure, legal grounds, methodology and calculations that led to the PTA conclusion. The text of the Draft Decision describes the planned PTA position which can be subject to amendment until the final Decision is made, among other things as a result of comments from stakeholders. The wording of the Draft should be read with this in mind.

¹ ESA has now issued a new Recommendation on wholesale markets for electronic communications services: EFTA Surveillance Authority Recommendation of 11 May 2016 on relevant product and service markets within the electronic communications sector susceptible to *ex ante* regulation in accordance with the Act referred to at point 5cl of Annex XI to the EEA Agreement (*Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communication networks and services*).

1.1 PTA Decision no. 8/2014

With reference to Article 17 of Act No. 81/2003 on Electronic Communications, as amended, the PTA analysed the wholesale market for terminating segments of leased lines (Market 6) and the PTA conclusion was published in the Administration's Decision no. 8/2014 on the designation of a company with significant market power and on the imposition of obligations on the wholesale market for terminating segments of leased lines on 6 May 2014.

With a view to the market definition and analysis of competition on the wholesale market for terminating segments of leased lines and in accordance with Paragraph 2 of Article 17, see Article 18 of the Electronic Communications Act, the PTA decided to maintain the designation of Mila as having significant market power on the relevant market.

In accordance with Article 27 on the Electronic Communications Act, the PTA decided to maintain the following obligations on Mila as a result of the designation the company as having significant market power on this market:

- Obligation to provide access
- Obligation for non-discrimination
- Obligation for transparency
- Obligation for separation of accountancy
- Obligation for price control
- Obligation for cost accounting

It was the conclusion of the PTA market analysis that competition is not sufficiently active and that Mila has significant market power on the relevant market. The PTA deems that Mila can hinder competition and can behave to an appreciable extent without taking into account competitors, customers and consumers. Mila thus has the possibility of maintaining abnormally high prices and/or of exerting margin squeeze.

It was the opinion of the PTA that obligations concerning transparency and non-discrimination are not on their own sufficient to solve competition problems such as cross-subsidy, price discrimination and excessive pricing. The PTA deemed an obligation on price control to be necessary to establish competition in the relevant market and to strengthen competition at retail level.

With the authority of Article 32 of the Electronic Communications Act the PTA imposed the obligation on Mila that the wholesale tariff for terminating segments of the company's leased lines should be cost oriented. When deciding prices for terminating segments of leased lines Mila shall apply the cost analysis methodology based on historical costs allocated to the services in question (HCA FAC) and the price of endpoint devices shall be based on replacement cost.

When implementing its cost analysis Mila shall base its methodology on Chapter IV of Regulation no. 564/2011 on bookkeeping and cost analysis in the operations of electronic communications companies, such as on evaluation of operational assets, life-cycle and WACC. Furthermore, account shall be taken of the PTA position on criteria and calculations as expressed in the Administration's Decision no. 7/2010 with respect to cost analysis for terminating segments of leased lines. When assessing the conclusion of the Mila cost analysis the Administration will keep in mind the average price for analogous products in the EEA, particularly where a recognised methodology is applied, such as BU LRIC+ methodology, when deciding price. The PTA will also have in mind that the tariff should relate logically to Mila's local loop leasing prices, with respect to potential over or under-pricing by the Skipti

Group of the above specified services. The PTA is however authorised to reject costs that the Administration considers to have resulted from uneconomical operations, see among other things Article 32 of the Electronic Communications Act No. 81/2003.

In the Decision it was specified that if the Mila cost analysis for terminating segments of leased lines returned a conclusion that the PTA considered unacceptable with the above considerations in mind, the PTA would reject such a conclusion. The Administration would review the criteria applied in the Mila cost analysis for the purpose of returning a conclusion which was in accordance with the above considerations and with the objectives of the EU Commission to support competition and to improve the investment environment on the electronic communications market.

The Mila cost analysis for wholesale tariff for terminating segments of leased lines shall be based on the following main criteria:

- Allocation of costs shall be based on accounting separation for the access network, on Mila asset bookkeeping and on costs from Mila's bookkeeping system where opex are entered under bookkeeping accounts.
- Costs for lease of local loops shall be according to the Mila wholesale tariff for local loops in each instance.
- When assessing investments in equipment for terminating segments of leased lines, the price of the equipment shall be according to replacement cost of modern equivalent asset (MEA) and to normal² renewal of such equipment.
- A depreciation methodology shall be used that reflects the use value of an asset.
- The annuity depreciation method shall be used to calculate annual investment costs.
- The number of lines shall be calculated taking into account line equivalents.
- The cost of the local loop network shall be captured, including share of joint costs, management, IT and senior management in accordance with accounting separation.
- Real return on investment shall be used as a reference, based on WACC real³ from capital bound in assets used in connection with providing service where the risk premium reflects the risk related to operations on the relevant market.
- Average unit cost for the whole country shall be calculated from allocated operational and investment costs divided by number of lines or line equivalents.

When deciding its tariff, Mila shall apply the above specified main criteria in its cost analysis.

1.2 Mila tariff for terminating segments of leased lines

The current Mila wholesale tariff for terminating segments of leased lines was decided with the PTA Decision no. 16/2013 dated 30 July 2013 and is as follows:

² PTA Decision no. 34/2011 used 50% reuse.

³ In accordance with Article 16 of Regulation no. 564/2011 the PTA decides on an annual basis the WACC which electronic communications companies should use as a reference in their calculations.

Leased lines without endpoint devices

	<i>Setup charge</i>	<i>Monthly charge</i>
2-wire line for voice	13,300	2,084
2-wire line for voice	13,300	4,168
Leased line 2-wire for data transfer	13,300	2,772
Leased line 4-wire for data transfer	13,300	5,544

Leased lines without endpoint devices, single segment

	<i>Setup charge</i>	<i>Monthly charge</i>
2-wire line for voice	6,650	1,042
2-wire line for voice	6,650	2,084
Leased line 2-wire for data transfer	6,650	1,386
Leased line 4-wire for data transfer	6,650	2,772

Digital line single segment with endpoint devices

	<i>Setup charge</i>	<i>Monthly charge</i>
64 Kbit	73,063	2,651
128 Kbit	73,063	2,651
256 Kbit	73,063	3,901
512 Kbit	73,063	4,110
2 Mbit	73,063	4,527

Digital line within exchange area without endpoint devices

	<i>Setup charge</i>	<i>Monthly charge</i>
64 Kbit	89,272	4,790
128 Kbit	89,272	4,790
256 Kbit	89,272	7,291
512 Kbit	89,272	7,708
2 Mbit	89,272	8,541

Digital line within exchange area with endpoint devices

	<i>Setup charge</i>	<i>Monthly charge</i>
64 Kbit	146,127	5,302
128 Kbit	146,127	5,302
256 Kbit	146,127	7,803
512 Kbit	146,127	8,220
2 Mbit	146,127	9,053

Ethernet over copper (EoC)

	<i>Setup charge</i>	<i>Monthly charge</i>
5 Mb/s	114,738	9,104
10 Mb/s	114,738	11,188
15 Mb/s	114,738	11,188
20 Mb/s	114,738	13,272
25 Mb/s	114,738	13,272
30 Mb/s	114,738	15,356
35 Mb/s	114,738	15,356
40 Mb/s	114,738	15,356
45 Mb/s	114,738	15,356

1.3 Written communications with Mila

In email communications between Mila and the PTA between 13 November 2014 and 21 January 2015, there was discussion on the manner of cost analysis on Markets 4, 5 and 6. In cost analysis of leased lines on Market 6, copper local loops are the main cost item. In order that all the analyses would be based on the same operational year, it was decided to delay analysis of Market 6 until analysis of Market 4 was completed.

In the case of cost analysis of fibre lines in an access network, it was decided that this analysis would be separate from the analysis of leased lines based on copper local loops.

On **3 February 2015**, Mila submitted a description of its cost accounting, along with a report from an independent auditor in accordance with the PTA Decision on Markets 4, 5 and 6.

In a letter from Mila to the PTA dated **27 March 2015**, the company submitted cost analysis for access to copper local loops.

On **30 April 2015**, Mila submitted cost analysis for digital leased lines in an access network and for Ethernet over copper. It was stated in a letter from Mila that the cost model for fibre lines in an access network would be delivered within a few weeks.

In an email from the PTA, dated **12 November 2015**, the PTA requested further documentation regarding turnover in each product category and on the impact of the increases on customers. The PTA also requested further information on a breakdown of opex.

On **22 November 2015**, Mila submitted a statement of monthly revenue for leased lines, with a breakdown of product categories and customers. In addition to this, Mila submitted further explanations of opex.

In a PTA email, dated **8 January 2016**, the PTA requested further information on shared costs and how they were divided between access network departments and between other departments. The PTA also requested information on setup charges and on utilisation of copper local loops.

In a letter of reply from Mila, dated **12 January 2016**, Mila submitted information on shared costs for the access network and a breakdown of setup charges. Mila also noted that both the upper and lower frequencies of the local loop were used for leased lines. In the previous analysis

there was a weighting on these lines and an estimate of the number of local loops, whereas now the calculations were made on the basis of an exact record of leased lines.

In an email, dated **14 January 2016**, Mila submitted further information on the division of shared costs between the company's departments.

In a letter from the PTA to Mila dated **21 January 2016**, the Administration raised objections to the cost share of the leased lines in shared costs. In the opinion of the PTA, the leased line share of shared costs was too high and was not in accordance with the scope of the service. It was not possible to endorse opex of [...] ⁴. The proportion of these costs of annual costs (annuities and opex less shared costs) was [...]. By comparison, this proportion for local loops was [...]. The PTA required that Mila reduced the share of leased lines in shared costs, such that it would be a maximum of ISK [...]. The PTA also required that the utilisation ratio for Ethernet over copper be [...], in accordance with prior PTA decisions. The PTA also requested that Mila revise prices for copper local loops in the model in accordance with the planned conclusion in the PTA draft decision on the review of the Mila wholesale tariff for copper local loops.

With an email, dated **21 January 2016**, Mila submitted a revised cost model in accordance with comments from the PTA. The tariff resulting from this revision was published for national consultation on 26 April 2016, the consultation lasted until 16 May 2016.

On **27 February 2017**, the PTA requested that Miles updated the analysis and Mila submitted an updated analysis on **17 March 2017**. PTA conclusion is based on this update of the cost analysis.

⁴ Information removed for purposes of confidentiality. The same applies to information provided in square brackets here below.

2 The PTA conclusion

2.1 General

In Sections 2.2 - 2.8 here below one can find the criteria and conclusions of the PTA Decision on the cost analysis here under discussion. There is discussion on the main aspects that the PTA considers important as criteria for the Administration's position when calculating a tariff for digital leased lines in the Mila access network, and in Ethernet over copper. The factors in question are the following:

- Structure of the model (2.2)
- Number of lines (2.3)
- Opex (2.4)
- Weighted average cost of capital (2.5)
- Equipment costs (2.6)
- Calculation of lease price (2.7)

Each sub-section is structured with a description of the Mila cost analysis coming first and then followed by the position of the PTA for each issue. In Section 2.8 the PTA Decision is then summarised before the wording of the Decision is given.

The PTA conclusion is based on authority granted to the Administration in the Electronic Communications Act where reference is particularly made to Article 32 on price control and to Article 31 on separation of accountancy and to PTA Decision no. 8/2014.

Mila has submitted a description of the company's cost accounting, along with a report from an independent auditor. Mila has also submitted an analysis of costs for access to terminating segments of leased lines, along with further explanations at the request of the PTA. The PTA conclusion is based on the Mila initial cost analysis from 30 April 2015 with later revisions, the latest revision was submitted on 17 March 2017. The conclusion is also based on the PTA conclusion on local loop prices according to the PTA draft decision which are now available.

2.2 Structure of the model

2.2.1 Mila cost analysis

In the Mila cost analysis dated 30 April 2015 the following is stated on the structure of the cost analysis:

“Mila records revenue and costs for the terminating segments of leased lines in cost centre 861300 Leased lines in access network.

Opex is booked on the following cost centres: [...]

The calculation of lease price uses the same methodology as in the cost analysis from 2011.

Very minor operations were however made to the calculation where Mila considers this to be appropriate:

- *The number of underlying local loops is largely based on the real number of local loops being used for each data transfer speed whereas previously the number was based on a specific assessment of the number of local loops for each data transfer speed.*
- *Opex is based on allocated opex for leased lines and for Ethernet over copper. Shared opex are divided between Ethernet over copper and leased lines proportionately according to the number of connections.*
- *Investments are based on purchase price. Similar utilisation of equipment as before is assumed.*
- *Installation costs are calculated in the same manner as in the previous analysis.*
- *The specific service charge will not be included in the calculation as it is now in reality included in senior management costs.”*

2.2.2 The position of the PTA

The Mila cost model is mostly structured in the same manner as the Mila cost analysis from 2011, see PTA Decision no. 34/2011 regarding cost analysis for terminating segments of leased lines. The Mila current tariff is based on the PTA Decision no. 16/2013, dated 30 July 2013, which also took into account the PTA decision from 2011 with respect to the cost structure of the cost model.

The main difference is that Mila uses the real number of local loops in use for each data transfer speed, whereas previously this number was assessed. This has the effect of variously increasing and decreasing local loop costs for varying data transfer speeds as is explained in more detail in the sections below.

The PTA did not endorse the amendment to utilisation of equipment for Ethernet over copper (EoC) proposed by Mila, see the Administration’s letter, dated 21 January 2016, and the conclusion of this cost analysis is based on unchanged utilisation of equipment. In other respects the PTA raises no objections to amendments proposed by Mila.

2.3 Number of lines

2.3.1 Mila cost analysis

In the Mila updated cost analysis, dated 17 March 2017, it is stated that when calculating the line equivalents the number of lines in December 2016 are used.

The table here below shows the Mila conclusion with respect to line equivalents. There the number of leased line connections for each individual speed and the line equivalent calculated from them. Mila stated that the line equivalent is one in the case of a leased line which lies from a point of termination to a technical space (single segment) and two in the case of a connection to two points of termination, that is to say from a point of termination to a telephone exchange and from a telephone exchange to a point of termination (2 segments).

The table furthermore shows the number of underlying local loops for each speed and their average number. [...] When assessing the number of local loops in each data transfer speed, the number of connections and local loops in each data transfer speed were added together and this was used to calculate the average.

	Number of segments	Number of local loops	Average number	Rounding
64 kb/s.....	[...]	[...]	[...]	[...]
128 kb/s.....	[...]	[...]	[...]	[...]
256 kb/s.....	[...]	[...]	[...]	[...]
512 kb/s.....	[...]	[...]	[...]	[...]
2 Mb/s.....	[...]	[...]	[...]	[...]

	Number	Number of equivalents	Number of local loops	Average number of local loops	Current number	Analysis 2011
Ethernet over copper						
5 Mb/s.....	[...]	[...]	[...]	[...]	[...]	[...]
10 Mb/s.....	[...]	[...]	[...]	[...]	[...]	[...]
15 Mb/s.....	[...]	[...]	[...]	[...]	[...]	[...]
20 Mb/s.....	[...]	[...]	[...]	[...]	[...]	[...]
25 Mb/s.....	[...]	[...]	[...]	[...]	[...]	[...]
30 Mb/s.....	[...]	[...]	[...]	[...]	[...]	[...]
35 Mb/s.....	[...]	[...]	[...]	[...]	[...]	[...]
40 Mb/s.....	[...]	[...]	[...]	[...]	[...]	[...]
45 Mb/s.....	[...]	[...]	[...]	[...]	[...]	[...]
Digital leased line within area						
64 kb/s.....	[...]	[...]	[...]	[...]	[...]	[...]
128 kb/s.....	[...]	[...]	[...]	[...]	[...]	[...]
256 kb/s.....	[...]	[...]	[...]	[...]	[...]	[...]
512 kb/s.....	[...]	[...]	[...]	[...]	[...]	[...]
2 Mb/s.....	[...]	[...]	[...]	[...]	[...]	[...]
Digital leased line between areas						
64 kb/s.....	[...]	[...]	[...]	[...]	[...]	[...]
128 kb/s.....	[...]	[...]	[...]	[...]	[...]	[...]
256 kb/s.....	[...]	[...]	[...]	[...]	[...]	[...]
512 kb/s.....	[...]	[...]	[...]	[...]	[...]	[...]
2 Mb/s.....	[...]	[...]	[...]	[...]	[...]	[...]
Digital leased line single segment						
64 kb/s.....	[...]	[...]	[...]	[...]	[...]	[...]
128 kb/s.....	[...]	[...]	[...]	[...]	[...]	[...]
256 kb/s.....	[...]	[...]	[...]	[...]	[...]	[...]
512 kb/s.....	[...]	[...]	[...]	[...]	[...]	[...]
2 Mb/s.....	[...]	[...]	[...]	[...]	[...]	[...]
	[...]	[...]	[...]	[...]	[...]	[...]

2.3.2 The position of the PTA

The Mila calculation of line equivalents is in accordance with calculations in the previous cost analysis of terminating segments of leased lines from 2011. The PTA raises no objections to

Mila calculations of line equivalents, the conclusion is that the calculation for the lease price shall be based on [...] line equivalents. Line equivalents are divided such that [...] are for Ethernet over copper and [...] for digital leased lines (SHDSL).

As stated here above, Mila has calculated the average number of local loops for each speed of leased line, and has adapted the conclusion to produce a tariff that increases incrementally by increasing connection speed. This has the effect of both increasing and decreasing local loop costs for individual leased lines in comparison with the cost analysis from 2011. The largest increase in local loop costs is for SHDSL leased lines at the lowest speeds as demand for such lines has decreased. The PTA raises no objections to this Mila methodology for deciding local loop costs of leased lines.

2.4 Opex

2.4.1 Mila cost analysis

In the Mila updated cost analysis dated 17 March 2017 the following table shows the opex for 2016:

Opex 2016	Total 2016	Depr./int.	Local loops	2016
61300 Leased lines in access network	[...]	[...]	[...]	[...]
61301 Peripherals, Capital City Area	[...]	[...]	[...]	[...]
61302 Peripherals, West-West fjords	[...]	[...]	[...]	[...]
61303 Peripherals, North Iceland	[...]	[...]	[...]	[...]
61304 Peripherals, East Iceland	[...]	[...]	[...]	[...]
61305 Peripherals, South Iceland	[...]	[...]	[...]	[...]
6,310 EoC Peripherals	[...]	[...]	[...]	[...]
Total	[...]	[...]	[...]	[...]

In the cost analysis, it is stated that [...]

In a letter that accompanied Mila update of the cost model, dated 17 March 2017, the following is stated regarding the setup fee:

"In the cost analysis for the operation year of 2014, setup fees were deducted as a whole from the operating costs. On closer look Mila believes that it is not right to do so. Material costs are not allocated to operating expenses and it is therefore not appropriate to deduct all the setup fees from the operating costs since a part of the setup fees are due to equipment. Also, a large part of the labour costs because of EOC was allocated to investment and should therefore not be deducted from the operating costs.

[...].

	Setup fee	There of labour	Allocated to investment	Deduction from Opex
EOC - setup fee.....	[...]	[...]	[...]	[...]
EOC - transfer fee.....	[...]	[...]		[...]
EOC - change in speed.....	[...]	[...]		[...]
Digital leased line single segment- transfer..	[...]	[...]		[...]
Digital leased line single segment- setup fee..	[...]	[...]		[...]
Withdrawal, work started.....	[...]	[...]		[...]
	[...]	[...]	[...]	[...]

The cost of installation of EOC is considerably lower than in the previous analysis, it is calculated from the cost booked on investment. Calculations suggest that it is easier to install the EOC connections than before. "

In the updated cost model is the following table, which shows the division of opex between leased lines and Ethernet over copper:

	EoC	SHDSL
Separable costs.....	[...]	[...]
Shared costs.....	[...]	[...]
Setup charges.....	[...]	[...]
	[...]	[...]
Number of segments	[...]	[...]
Cost/segment per month	[...]	[...]

Costs for local loops

As stated in the Section here above about the number of lines, Mila uses the real count of local loops being used for each connection when deciding the costs for lease of copper local loops. The number used is the average number which is rounded to one decimal point. [...]

2-wire lines are assumed for local loops. 4-wire lines are considered to be two local loops.

The following table shows the number of local loops for each speed in the Mila calculation of local loop costs for each line segment.

	Number
64 kb/s.....	[...]
128 kb/s.....	[...]
256 kb/s.....	[...]
512 kb/s.....	[...]
2 Mb/s.....	[...]

When calculating local loop costs for Ethernet connections, Mila uses the following table of the number of local loops for the various connections speeds:

	Number
5 Mb/s.....	[...]
10 Mb/s.....	[...]
15 Mb/s.....	[...]
20 Mb/s.....	[...]
25 Mb/s.....	[...]
30 Mb/s.....	[...]
35 Mb/s.....	[...]
40 Mb/s.....	[...]
45 Mb/s.....	[...]

The Mila calculation of local loop costs was based on the conclusion of the cost analysis of access to copper local loops (fully unbundled access to the local loop) which was being reviewed by the PTA at that time.

2.4.2 The position of the PTA

Mila has submitted information on opex for access to terminating segments of the company's leased lines for the year 2014. The PTA uses information supplied by Mila in its assessment. The PTA also builds on data that shows financial separation in Mila's operations in accordance with the obligation for separation of accountancy.

In PTA letter to Mila dated 21 January 2016, the Authority raised objections to Mila opex for the year 2014. PTA objected to the termination segment's share of common costs [...].

In the opinion of the PTA, the leased line share of common costs was too high and was not in accordance with the scope of the service. [...]. PTA requested that the cost would be lowered to the same portion of annual cost as in the local loop market.

In accordance with this, the Administration proposed that the share of leased lines in common costs [...] should be limited to ISK [...]. The PTA therefore required that Mila would reduce accordingly the opex used as a basis for calculations of the monthly charges for leased lines.

An examination of Mila operating costs for the financial year 2016 reveals that the cost of these items, i.e. [...] in 2016 is ISK [...] and therefore within the limits set by the PTA.

As stated above, only the part of the setup fee which is booked as operating expenses is deducted from the total operating costs. PTA does not object to this procedure and the deduction because of setup fees will hence be ISK [...] kr. The subtraction is divided between EOC and SHDSL in the same proportions as the number of connections.

In the following table is a comparison of the opex in 2014 and 2016, used in calculation of the monthly charges. Part of the opex is separable while shared costs are divided between EoC and SHDL leased lines in accordance with the number of connections of each type. The following table shows the division of opex:

Division of opex	2016		2014	
	EoC	SHDSL	EoC	SHDSL
Separable costs	[...]	[...]	[...]	[...]
Shared costs	[...]	[...]	[...]	[...]
Deductible setup costs	[...]	[...]	[...]	[...]
Annual costs for monthly charges	[...]	[...]	[...]	[...]
Number of segments	[...]	[...]	[...]	[...]
Cost/segment per month	[...]	[...]	[...]	[...]

Total operating costs used as a basis for the calculation of the monthly fee is ISK [...] in 2016 but was ISK [...] for 2014 and is therefore virtually unchanged. However, due to the reduction in number of lines the operating expenses per segment increased from 2014.

The PTA endorses the Mila conclusion that opex per month for each segment is ISK [...] for EoC and ISK [...] for digital leased lines (SHDSL).

The costs for local loops are calculated on the basis of the average number of local loops in each data transfer speed and on the copper local loop tariff.

The Mila cost analysis for access to copper local loops has been under review with the PTA and the planned PTA conclusion is that the monthly price for access to copper local loops will be ISK 1,406.

Accordingly, the local loop costs will be as follows:

Digital leased line, each segment

	Number	Cost pr. segment
64 kb/s	[...]	[...]
128 kb/s	[...]	[...]
256 kb/s	[...]	[...]
512 kb/s	[...]	[...]
2 Mb/s	[...]	[...]

Ethernet over copper

	Number	Cost pr. segment
5 Mb/s	[...]	[...]
10 Mb/s	[...]	[...]
15 Mb/s	[...]	[...]
20 Mb/s	[...]	[...]
25 Mb/s	[...]	[...]
30 Mb/s	[...]	[...]
35 Mb/s	[...]	[...]
40 Mb/s	[...]	[...]
45 Mb/s	[...]	[...]

2.5 Weighted average cost of capital

In its calculations, Mila uses 7.0% weighted average cost of capital (WACC) in accordance with PTA instructions, see Mila cost analysis for copper local loops.

2.6 Equipment costs

2.6.1 Mila cost analysis

Digital leased lines within areas and between areas

In the Mila letter, dated 17 March 2017, it is stated that in the cost analysis the booked value of the equipment in stock at the end of 2016 is used. The cost of installation increases because of increase in labour cost while the equipment cost for leased lines decreases because of depreciation of the equipment.

In the cost analysis it is stated that as there are 2 segments when the leased line is leased within an area and between areas, the opex per line is doubled. This is in accordance with calculations from 2011.

Digital leased line within area

The conclusion of Mila calculations of setup charges and monthly charges for equipment items for leased lines within an area is as follows:

	Unit price	Number	Total	Utilisation	Setup charge	Monthly-Charge
SHDSL-2 DTM DC G703S LT/NT..	[...]	[...]	[...]	[...]	[...]	[...]
Installation.....	[...]	[...]	[...]	[...]	[...]	
Opex.....						[...]
Total					[...]	[...]

Leased lines between areas

The conclusion of Mila calculations of setup charges and monthly charges for equipment items for leased lines between areas is as follows:

	Unit price	Number	Total	utilisation	Setup charge	Monthly Charge
LR-SHDSL-s_DTM AC G703S.....	[...]	[...]	[...]	[...]	[...]	[...]
LR SHDSL-2 LCM.....	[...]	[...]	[...]	[...]	[...]	[...]
LRMOD X21.....	[...]	[...]	[...]	[...]	[...]	[...]
Installation.....	[...]	[...]	[...]		[...]	
Transport.....	[...]	[...]	[...]		[...]	
Opex						[...]
Total					[...]	[...]

Leased lines - single segment

The conclusion of Mila calculations of setup charges and monthly charges for equipment items for leased lines between areas is as follows:

	Unit price	Number	Total	utilisation	Setup charge	Monthly Charge
SHDSL-2 DTM DC G703S LT/NT..	[...]	[...]	[...]	[...]	[...]	[...]
LR SHDSL-2 LCM.....	[...]	[...]	[...]	[...]	[...]	[...]
LRMOD X21.....	[...]	[...]	[...]	[...]	[...]	[...]
Installation.....	[...]	[...]	[...]		[...]	
Transport.....	[...]	[...]	[...]		[...]	
Opex.....						[...]
					[...]	[...]

Ethernet over copper

The conclusion of Mila calculations of setup charges and monthly charges for equipment items for Ethernet over copper is as follows:

	Total	Utilisation	Setup charge	Monthly Charge
Equipment for EoC.....	[...]	[...]	[...]	[...]
Installation.....	[...]		[...]	
Opex.....				[...]
Total			[...]	[...]

2.6.2 The position of the PTA

The calculation of setup charges and monthly charges are in accordance with the methodology used in the PTA Decision no. 34/2011 with respect to the Mila ehf. cost analysis of the tariff for terminating segments of leased lines. Equipment is assessed at [...] of replacement cost. Half of the purchase price and the costs of installation are allocated to the setup charge and half to the monthly charge (annual payment). The decision on the monthly charge is based on 7.0% WACC and on a 6.67 year lifetime of the equipment.

The PTA raises no objections to the Mila calculations on the monthly charge for equipment and to the setup charge.

2.7 Calculation of lease price

The monthly charge for leased lines is composed of opex, costs for equipment and for local loop leasing as has been specified here above. This is a unit cost.

The conclusions of calculations of lease prices can be found in the following tables:

Digital leased line within the same area

Monthly charge						
Speed	Equipment	Operations	Local loops	Total	Previous price	Increase
64 kb/s	[...]	[...]	[...]	7,859	4,790	64%
128 kb/s	[...]	[...]	[...]	8,140	4,790	70%
256 kb/s	[...]	[...]	[...]	8,421	7,291	15%
512 kb/s	[...]	[...]	[...]	8,983	7,708	17%
2 Mb/s	[...]	[...]	[...]	9,124	8,541	7%
Setup charge				87,907	89,272	-2%

Leased line between areas

Monthly charge

Speed	Equipment	Operations	Local loops	Total	Previous price	Increase
64 kb/s	[...]	[...]	[...]	8,288	5,302	56%
128 kb/s	[...]	[...]	[...]	8,569	5,302	62%
256 kb/s	[...]	[...]	[...]	8,850	7,803	13%
512 kb/s	[...]	[...]	[...]	9,413	8,220	15%
2 Mb/s	[...]	[...]	[...]	9,553	9,053	6%
Setup charge				152,225	146,127	4%

Leased line - single segment

Monthly charge

Speed	Equipment	Operations	Local loops	Total	Previous price	Increase
64 kb/s	[...]	[...]	[...]	4,144	2,651	56%
128 kb/s	[...]	[...]	[...]	4,284	2,651	62%
256 kb/s	[...]	[...]	[...]	4,425	3,901	13%
512 kb/s	[...]	[...]	[...]	4,706	4,110	15%
2 Mb/s	[...]	[...]	[...]	4,777	4,527	6%
Setup charge				76,112	73,063	4%

Ethernet over copper

Monthly charge

Speed	Equipment	Operations	Local loops	Total	Previous price	Increase
5 Mb/s	[...]	[...]	[...]	11,298	9,104	24%
10 Mb/s	[...]	[...]	[...]	12,704	11,188	14%
15 Mb/s	[...]	[...]	[...]	14,110	11,188	26%
20 Mb/s	[...]	[...]	[...]	15,516	13,272	17%
25 Mb/s	[...]	[...]	[...]	18,328	13,272	38%
30 Mb/s	[...]	[...]	[...]	19,031	15,356	24%
35 Mb/s	[...]	[...]	[...]	19,734	15,356	29%
40 Mb/s	[...]	[...]	[...]	20,437	15,356	33%
45 Mb/s	[...]	[...]	[...]	20,437	15,356	33%
Setup charge				95,587	114,738	-17%

The current tariff for terminating segments of leased lines was decided with PTA Decision no. 16/2013 and that tariff came into force on 1 August 2013. At that time, it was only a case of update in prices in accordance with the increase in tariffs for access to copper local loops. Operating costs and equipment costs were not analysed and kept unchanged in the calculation of the tariff.

As can be seen here above the tariff items increased to a varying degree in price. The weighted average price increase in monthly charges is 14% on the basis of sold connections in December 2016. This increase exceeds price index increases since the current tariff came into force. If however, the price development is considered as from the total revision of the tariff for termination segments of leased lines made in 2011 it comes to light that the increase is now in line with the increase in the consumer price index since then. Setup fees for *Ethernet over copper* decrease by 17%, and for *Leased lines within the area* decrease by 2%. Setup fees for other leased lines increase slightly, or about 4%.

The PTA raises no objections to the above described Mila methodology for calculating the lease price for access to terminating segments of leased lines.

The above specified conclusion is based on the cost model submitted by Mila on 30 April 2015, with latest update on 17 March 2017 and on the planned conclusion on local loop price.

2.8 The PTA conclusion

In Decision no. 8/2014, the PTA imposed an obligation for price control on Mila for access to terminating segments of leased lines with the authority of Article 32 of the Electronic Communications Act. Pursuant to Paragraph 4 of Article 32 of the same Act it was prescribed that the tariff for the access should be cost-oriented and should fulfil specific conditions.

Pursuant to the PTA Decision, Mila submitted a cost analysis for access to leased lines in the Mila access network on 30 April 2015. The cost analysis was based on historical costs from 2014.

On 27 February 2017, PTA requested Mila to update its cost analysis on Markets 4/2008, 5/2008 and 6/2008, based on operating figures in 2016. On 17 March 2017, Mila submitted an updated cost model for terminating segment of leased lines. The calculated price for access to terminating segment of leased lines is therefore based on information of the financial year 2016.

In PTA Decision no. 8/2014 it is specified that the Administration will have in mind the average price for analogous products in the EEA, particularly where a recognised methodology is applied, such as BU LRIC+ methodology, when deciding price.

It could prove difficult to find products that are fully analogous with the products offered by Mila under discussion here. The PTA has chosen to limit the comparison to Denmark as that is where the product offer is most comparable. In Denmark there are price obligations on terminating segments of leased lines up to 2 Mb/s and in that country the electronic communications company TDC has significant market power. Comparison with TDC prices does not give rise to the need to object to the conclusion on Mila prices for terminating segments of leased lines.

The PTA Decision is based on the Mila cost analysis for access to leased lines in an access network submitted by Mila on 30 April 2015 and which was revised on 21 January 2016. The conclusion is furthermore based on a planned PTA conclusion on local loop prices, which was published for consultation last 26 April on the Administration's web page.

In Mila's letter, dated 17 March 2017, it is stated that Míla intends to offer Ethernet over copper with up to 100 Mb/s data transfer speeds. Mila stated that there is no additional cost to offer 100 Mb/s compared to 45 Mb/s. The same number of local loops are required and the equipment installed today offers this option. Míla intends to offer EOC from 40 Mb/s and up to 100 Mb/s at the same price. Mila does however make a reservation that the company cannot guarantee 100 Mb/s in all cases, as it depends on the situation at each location whether the maximum speed is possible. As mentioned above, the same price is for 40 Mb/s and 45 Mb/s Ethernet over copper. Instead of these two items in the current tariff, comes a new item, 40 -100 Mb/s.

In accordance with the criteria discussed here above, the PTA endorses the following Mila tariff for access to terminating segments of leased lines which are based on copper local loops:

Digital leased line within the same area

Speed	Monthly charge
64 kb/s	7,859 ISK
128 kb/s	8,140 ISK
256 kb/s	8,421 ISK
512 kb/s	8,983 ISK
2 Mb/s	9,124 ISK
Setup charge	87,907 ISK

Leased lines between areas

Speed	Monthly charge
64 kb/s	8,288 ISK
128 kb/s	8,569 ISK
256 kb/s	8,850 ISK
512 kb/s	9,413 ISK
2 Mb/s	9,553 ISK
Setup charge	152,225 ISK

Leased lines - single segment

Speed	Monthly charge
64 kb/s	4,144 ISK
128 kb/s	4,284 ISK
256 kb/s	4,425 ISK
512 kb/s	4,706 ISK
2 Mb/s	4,777 ISK
Setup charge	76,112 ISK

Ethernet over copper

Speed	Monthly charge
5 Mb/s	11,298 ISK
10 Mb/s	12,704 ISK
15 Mb/s	14,110 ISK
20 Mb/s	15,516 ISK
25 Mb/s	18,328 ISK
30 Mb/s	19,031 ISK
35 Mb/s	19,734 ISK
40 -100 Mb/s	20,437 ISK
Setup charge	95,587 ISK

Mila has also stated that the company does not intend to change the price list for the following services:

Service	Charge
Digital leased line within the same area - transfer	36,532 ISK
Digital leased line between areas – transfer	73,064 ISK
Digital leased line within the same area - change in speed	16,899 ISK
Digital leased line between areas - change in speed	28,164 ISK
Withdrawal, work started on line setup	8,884 ISK
Withdrawal, work started on equipment setup	36,614 ISK
EOC – transfer	57,369 ISK
EOC - change in speed	16,889 ISK

All prices are ex VAT.

As stated here above in Section 1.2, the current Mila tariff also covers base lines without equipment where the monthly price for access to such lines follows the price for access to the local loop in each instance.

In PTA decision no. 21/2014, it is stated that the tariffs should be reviewed annually in accordance with the annual update of the cost analysis according to the cost model that has now been approved. Accordingly, Mila shall submit an update to the cost model before April 1, 2018. If no major changes are made to the cost model, the PTA expects that the Authority will publish a new price decision by the end of 2018.

The Decision

The Post and Telecom Administration endorses the Míla ehf. cost analysis, according to the most recent revisions of the analysis received by the Administration on 17 March 2017.

Setup charges and price per month for the terminating segments of leased lines shall be in accordance with Appendix I to this Decision.

The new tariff shall come into force concurrently with the new Míla tariff for access to copper local loop. Míla ehf. shall notify the coming into force of the new tariff with at least 60 days' notice. Míla shall also update its reference offer for open access to the termination segment of leased lines no later than on the coming into force of the above specified price changes.

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. 36/2009 on the Appellate Committee for Electronic Communications and Postal Affairs.

Reykjavík, XX XX 2017

Hrafnkell V. Gíslason

Óskar Þórðarson

Appendix I: Price list