PÓST- OG FJARSKIPTASTOFNUN

Draft Decision

Review of Mila wholesale tariff for the Metropolitan Data Highway (MDH) connections on the market for trunk line segments of leased lines (previously Market 14)

TABLE OF CONTENTS
page

1 Introduction

Míla ehf. tariff for MDH here under discussion is based on those obligations imposed on the company with the Decision of the Post and Telecom Administration (PTA) no. 21/2015 dated 12 August 2015.

The products covered by the Mila tariff belong to the wholesale market for trunk segments of leased lines which is Market 14 pursuant to the EFTA Surveillance Authority (ESA) Recommendation from 2004.

The planned Decision replaces the PTA Decision no. 24/2015 on review of the Mila tariff for MDH connections.

The PTA plans to agree to the Mila request that the price for 1 Gb/s MDH shall remain at ISK 95,000/month and the price for 10 Gb/s MDH shall be ISK 120,000/month. The PTA furthermore intends to accept the Mila request to offer 100 Gb/s MDH between specific locations and that agreements on 100 Gb/s MDH be binding for 3 years. According to Mila cost calculations, the lease price of a 100 Gb/s MDH will be ISK 655,000 per month.

The PTA opened a national consultation on the preliminary draft to the Decision here under discussion on 19 October 2015 and the consultation ran until last 9 November. PTA received no comments.

The following sections cover the 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. The wording of the draft should be read with this in mind.

1.1 PTA Decision no. 21/2015

With PTA Decision no. 21/2015 dated 12 August 2015 the PTA designated Mila as a company with significant market power on the market for trunk segments of leased lines.

With the authority of Article 32 of the Electronic Communications Act the PTA imposed the obligation on Míla for a cost oriented wholesale tariff for trunk segments of the company's leased lines. According to the Decision, MDH are covered by the Mila price control obligation on this market. When deciding prices for trunk segments of leased lines, the cost analysis methodology shall be used which is based on historical costs allocated to the relevant service (HCA FAC). Replacement cost of operational assets shall however be taken into account when calculating capex.

When implementing cost analysis, Míla shall base its methodology on Chapter IV of Regulation no. 564/2011 on accounting and cost analysis in the operations of electronic communications companies, such as on evaluation of operational assets, lifetime and required rate of return.

1.2 PTA Decision no. 24/2015

PTA Decision no. 25/2015, dated 12 August 2015 on the review of Mila tariff for MDH connections came subsequent to a Mila cost analysis of MDH connections.

The conclusion of the cost analysis was that the lease price for a 1 Gb/s MDH would remain unchanged at ISK 95,000 per month while the lease price for a 10 Gb/s MDH should increase from ISK 120,000 to ISK 160,000 per month. The start-up charge for an MDH connection would remain unchanged at ISK 107,000 per connection. According to the Decision the coming into force of this increase of 10 Gb/s MDH connections was 1 October 2015.

The Mila cost analysis was initially submitted in October 2013 and was based on capex and opex for MDH connections from 2010 until June 2013. Mila revised its cost analysis in October 2014 and the increase in the number of MDH that had taken place at that time was taken into account as was the related additional investment etc.

1.3 Communications by letter between PTA and Mila

On **11 September 2015** Mila submitted cost analysis for wholesale MDH. Mila requested that the PTA authorise Mila to withdraw the price increase in MDH with 10 Gb/s capacity which was to come into force on the coming 1 October given an unchanged situation. The reason was that the grounds for the calculated price had changed during the last months:

- During the last months the equipment that was initially purchased had been replaced and was of a different type than the equipment currently in use.
- Price of equipment had dropped significantly.
- There had been an increase in the number of MDH connections with 10 Gb/s capacity.

Mila furthermore notified the intention to offer MDH with 100 Gb/s capacity between specific locations. The connections will be delivered as 1 x Gb/s or 10 x 10 Gb/s.

Mila stated that the structure of the cost analysis was largely the same as the cost analysis of MDH on which the PTA had based its last Decision. As the new tariff would come into force on the coming 1 October, Mila requested that the PTA expedite its review of the cost analysis of 1 Gb/s and 10 Gb/s MDH connections and make an provisional Decision on these connections so that there would be no need for a price increase. No request was made for fast-tracking cost analysis of 100 Gb/s.

During the period **17 September** to **1 October 2015** Mila and the PTA exchanged a number of letters regarding capex, operational costs, cost allocation, the number of MDH and the structure for 100 Gb/s MDH connections.

On **1 October 2015** the PTA sent a letter of notification to Mila where it was stated that the Administration planned to reject the Mila request for an provisional Decision to the effect that the company was authorised to withdraw the price increase in 10 Gb/s MDH connections prescribed in the PTA Decision no. 24/2015 which was to come into force from and including 1 October 2015.

On **5 October 2015** Mila submitted a new cost analysis. This analysis took into account the changes that would result from 100 Gb/s MDH connections being offered for sale and its impact on the cost of 1 and 10 Gb/s MDH connections. Mila requested that the price for 1 Gb/s MDH should remain at ISK 95,000/month and the price for 10 Gb/s MDH should be ISK 120,000/month. Mila subsequently submitted a revised analysis on last 7 October and it is on this analysis that the PTA conclusions are based.

2 The PTA conclusion

In the sections 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 MDH connections.

2.1 Weighted average cost of capital (WACC)

2.1.1 Mila cost analysis

In the Mila cost analysis dated 11 September 2015 the following was stated:

"Weighted average cost of capital (WACC) is calculated as follows:

	2014
Risk-free rate...............................	2.9%
Debt premium.............................	3.0%
Cost of debt	*5.9%*
Market premium.........................	5.0%
Unlevered beta............................	51.0%
Unlevered beta............................	73.0%
Equity...	65.0%
Liabilities/Equity..........................	53.8%
Other risk (alpha).........................	0.0%
Tax rate.......................................	20.0%
Required rate of return after tax	*6.54%*
Required rate of return pre-tax	*8.2%*
WACC pre-tax	7.4%

Risk-free interest takes into account the average for the last five years on indexed notes in the bond Category HFF1504 2034. This calculation is in accordance with the calculation of weighted average cost of capital in other analyses that have been sent to the PTA."

2.1.2 The position of the PTA

In Article 16 of Regulation no. 564/2011 on accounting and cost analysis in operations of electronic communications undertakings it is stated that the cost of capital bound in assets that are used in connection with the provision of service or service goods shall be calculated. The rate of return shall be based on weighted average cost of capital (WACC) which is calculated from the rate of return requirement on equity and the rate of return requirement on debts in accordance with Regulation no. 564/2011. The CAPM model shall be used when calculating the rate of return on capital assets and the rate shall reflect the time value and the risk related to operations on the market in question. The cost of debt shall be calculated as the sum of risk-free interest and interest premium which reflects normal mark-up by companies on the market. The PTA shall decide at least once a year the required rate of return for specific telecom markets based on market mark-up, efficient gearing and the position with respect to working capital and debts.

WACC using the PTA criteria is shown in the table here below.

Rate of return	*2014*
Risk-free interest	2.89%
Unlevered beta	0.51
Levered beta	0.73
Debts/equity	0.54
Market premium	5.00%
Return on equity	**6.54%**
Risk-free interest	2.89%
Debt premium	3.00%
Cost of debt	**5.89%**
Interest-bearing debt%	35%
Equity%	65%
Tax rate	20%
Cost of debts after tax	4.71%
Return on equity pre-tax	8.17%
WACC pre-tax	**7.4%**

In line with the above the PTA proposes that WACC should be 7.4%.

Calculations based on data on comparison companies from the Bloomberg database indicate that the beta value for electronic communications companies lies in the range 0.45-0.57. The PTA has thus decided to use the value 0.51.

The PTA considers it appropriate to set the risk-free interest at the rate of return on HFF 1506 2044 30 Housing Financing Fund bonds instead of on HFF 1504 2034 as the former bonds best reflect the current payment flow being converted to current value when one takes into account the duration of useful life.

There has however been uncertainty recently about the future of the Housing Financing Fund and in the opinion of analysts a risk premium has developed on top of the indexed Housing Financing Fund bonds. This indicates that the rate of return on HFF bond issues no longer reflects risk-free interest on the market. In order to evaluate risk-free interest, the PTA takes into account an adjustment to the amount of estimated "Housing Financing Fund premium" in each instance.

Given the above specified criteria the average risk-free interest for the last 5 years is 2.89%.

In accordance with the above it is the opinion of the PTA that WACC real for an electronic communications company in Iceland is 7.4% for the year 2014 in calculations of rate of return for capital bound in assets used in connection with the company's provision of services.

Mila calculations are in accordance with this PTA assessment.

2.2 Opex

Opex is based on a Mila estimate of maintenance costs and of other operational costs, composed of hosting in technical space, electricity and fibre-optic lines.

2.2.1 Mila cost analysis

In the Mila cost analysis, opex is calculated in a similar manner as in the prior Mila analysis.

Maintenance cost is calculated as a proportion of annual capital cost and is based on the same proportion used in the last analysis, [...][1] for 1 and 10 Gb/s MDH connections. [...]

Other operational costs include hosting in technical spaces, electricity and lease of fibre-optic lines.

Mila calculates costs for hosting at those locations where MDH connections are installed. Here below one can see the Mila overview of rent for premises for MDH: [...]

The cost of hosting [...] is allocated to 1, 10 and 100 Gb/s MDH connections while the cost for hosting at other locations is allocated to 1 and 10 Gb/s MDH connections.

When deciding costs for lease of fibre-optic, Mila allows for the same trunk lines as in the prior analysis. The following table shows Mila cost calculations for fibre-optic lease:[...]

The calculation of fibre-optic costs is based on the Mila tariff which came into force last 1 October having taken into account discounts on offer.

[...]

2.2.2 The position of the PTA

According to the PTA Decision no. 21/2015, opex shall be based on the prior financial year in each instance. This approach is however unrealistic in the case of a totally new product which is developing rapidly. As pointed out by Mila, MDH is a relatively new product for the company and there is not yet much experience of maintenance costs for the system. In addition to this Mila has replaced much of the system equipment during the short space of time that the product has been on offer. In the same manner as in the last cost analysis of MDH, Mila has thus chosen to assess maintenance costs in another manner than by using booked opex.

Maintenance cost is calculated as a proportion of annual capital cost where the same proportion is used as in the last cost analysis for 1 and 10 Gb/s MDH connections as was used when calculating maintenance cost of Mila Ethernet service according to the PTA Decision no. 23/2015. [...]

In addition to maintenance costs, costs are calculated for hosting in equipment space, electricity and fibre-optic lease. These calculations are in accordance with calculations in the last cost analysis of MDH.

Opex is allocated to 1, 10 and 100 Gb/s MDH connections at those locations where this is appropriate and otherwise divided between 1 and 10 Gb/s MDH connections in accordance with the number of connections of each type.

The PTA makes no objection to the Mila methodology for calculating opex. Mila mainly applies the same methodology as in the last analysis.

[1] Information removed for purposes of confidentiality. The same applies to information provided in square brackets here above.

2.3 Investment costs

Capex is based on investments for MDH connections during the period 2010 until July 2015 and Mila decides replacement cost on the basis of capex for these years.

2.3.1 Mila cost analysis

In the Mila cost analysis it is stated that equipment [...] that was initially purchased has been replaced and that in addition to this the price of the equipment has decreased significantly. Mila chose to amend calculations from the last analysis in such a manner that the investment in [...] equipment was removed from the calculations. Mila decided the replacement cost by using the price of other equipment from the most recent purchase of equipment.

Mila uses the same kind of categorisation of investment between 1 Gb/s MDH and 10 Gb/s MDH connections as was used in the last analysis. Capex (material and labour) which was specifically for 10 Gb/s connections was allocated directly to 10 Gb/s and the capex for 1Gb/s connections was allocated directly to 1 Gb/s.

Capex for investments used jointly by 1 Gb/s MDH and 10 Gb/s MDH was divided equally between these MDH in accordance with the number of connections.

[...] Mila allows for 5 year useful life of the investments in 1 and 10 Gb/s MDH, which is the same as was allowed for in the last analysis.

[...] Mila makes the condition for leasing these connections that a binding agreement be made for a term of 3 years. Mila considers this to be necessary as the investment entails a significant risk and potential customers are few. Mila allows for 4 year useful life for this investment.

2.3.2 The position of the PTA

According to the PTA Decision no. 21/2015, Mila is authorised to use replacement cost of operational assets and Mila has chosen to do in this cost analysis. The reason is that there is a significant reduction in the price of equipment used to provide this service. In the opinion of Mila the prior approach to assessment of capex would have returned an excessively high lease price.

When deciding investment costs, Mila calculates investment costs for each MDH connection on the basis of the existing number of MDH connections. [...] On the basis of developments in recent years it is likely that the investment bound in equipment which will be no longer used for this reason will be used to some extent during the coming years, as 10 Gb/s MDH connections have been recently on the increase. [...]

Míla estimates capex for 100 Gb/s MDH connections on the basis of the cost of the equipment in which the company needs to invest to be able to offer these connections and allows for capex of up to [...] million. Mila considers a four year useful life to be adequate for this equipment as one must assume that the price of such equipment will steadily decrease, given developments in recent years.

The PTA makes no objection to the Mila methodology for calculating capex.

Mila makes the condition for leasing 100 Mb/s MDH connections that a binding agreement be made for a term of 3 years. Mila justifies the necessity for such a long period of commitment with the fact that the investment entails a significant risk and possible customers are few. The main rule in agreements with customers has been that additional notice to terminate an agreement has not been longer than 3 months. The PTA does not object to the three-year binding time. In this instance in the light of limited demand for this product and of the inherent investment risk.

2.4 Setup charges

Revenue from setup charges is deducted from capex. Mila proposes an unchanged setup charge of ISK 107,000 per connection regardless of connection capacity.

The PTA makes no objection to the Mila proposal for setup charges. Setup charges are in accordance with such charges for leased lines and Ethernet connections offered by the company on this market.

2.5 Number of connections

It was stated in the Mila cost analysis that in July 2015 there were [...] 10 Gb/s MDH connections and [...] 1 Gb/s MDH connections.

In PTA Decision no. 24/2015 it was stated that there were [...] 1 Gb/s MDH connections and [...] 10 Gb/s MDH connections, making a total of [...].

As the Mila calculations assume that 100 Gb/s MDH connections will be added, the company allows for [...] 10 Gb/s MDH connections as one can expect customers to cancel [...] Gb/s MDH connections when they purchase 100 Gb/s MDH connections. Given existing leasing of MDH to customers one can allow for a reduction in 10 Gb/s MDH connections by about [...] with the advent of 100 Gb/s MDH connections.

2.6 Conclusion on tariff for MDH

The following table shows calculations of monthly charges for MDH given the above specified criteria on investments, opex, setup charges, WACC, useful life and number of MDH connections.

[...]

In the light of this conclusion the PTA accepts the Mila request that the price for **1 Gb/s MDH** shall remain at **ISK 95,000/month** and the price for **10 Gb/s MDH** shall be **ISK 120,000/month**.

The PTA also accepts the Mila request to offer 100 Gb/s MDH connections and that the agreement for a 100 Gb/s MDH connection shall be binding for 3 years. According to the above specified calculations, the price for **100 Gb/s MDH connection** between Valhallarbraut, Steinhella and Suðurlandsbraut is **ISK 655,000/month**. Mila plans to deliver 100 Gb/s connections as 1 x 100 Gb/s or 10 x 10 Gb/s.

DECISION

The Post and Telecom Administration endorses the Míla ehf. revised price calculations for MDH connections. Setup charge and monthly lease charge shall be as follows:

- **Setup charge: ISK 107,000 per connection.**
- **1 Gb/s connection: ISK 95,000 per month.**
- **10 Gb/s connection: ISK 120,000 per month.**
- **100 Gb/s connection: ISK 655,000 per month.**

The above prices are ex VAT.

The provisions of chapter 3 in Mila's reference offer applies to the coming into force of the new tariff. There it is stated that Mila shall inform the service purchaser of amendments to the tariff with at least 60 days' notice. In this instance PTA considers it appropriate that the tariff change shall apply on the turn of a month and that the new tariff will come into force on the next turn of the month after the 60 days' notice has passed.

The new Míla ehf. tariff shall be part of the company's reference offer for leased lines.

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 2015

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Hrafnkell V. Gíslason

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