POST AND TELECOM
ADMINISTRATION
IN ICELAND

Draft Decision on Mila ehf. cost analysis of tariff for lease of facilities (hosting)

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1. INTRODUCTION

1.1 Obligations for access to facilities and price control

In the following Decisions of the Post and Telecom Administration obligations were imposed on Mila ehf. (Mila) for access to facilities and for price control:

- No. 26/2007 on the designation of undertakings with significant market power and imposition of obligations in the market for wholesale unbundled access to copper local loops, dated 21 December 2007,
- No. 8/2008 on the designation of undertakings with significant market power and imposition of obligations in the market for wholesale broadband access, dated 18 April 2008, and
- No. 20/2007 on the designation of undertakings with significant market power and the imposition of obligations in the retail market for the minimum set of leased lines, the wholesale market for terminating segments of leased lines, and the wholesale market for trunk segments of leased lines, dated 14 September 2007.

The price for access was to be based on historical costs. Investment was to be taken into account and reasonable return on capital tied in investments, while also taking into account the risk of the investment.

In the cost analysis here under discussion, costs are shown for hosting of equipment in buildings and on masts. The analysis shall show a monthly rental fee in accordance with varying locations of the facilities and the size of cabinets that are on offer. In addition to this the monthly price for hosting on masts is shown on the basis of the size of the Lease units, position on the mast and geographical location. In the calculation for costs for hosting, the costs related to the Telecommunications Fund highway tender (GSM I) is subtracted, and in addition to this electricity costs are not included in the analysis.

1.2 PTA Decision no. 41/2010 on cost analysis by Mila ehf. of tariff for lease of facilities (hosting).

On 28 May 2010 Mila submitted to PTA a cost analysis for access to facilities in buildings and mast. After a review of the cost analysis the PTA commented on the assessment of investments in the Mila buildings, support systems and facilities. Because of uncertainty of the reliability of data, in particular for investments in buildings and related infrastructures from1996 and older, PTA requested for reassessment of the initial investment and the lifetime of buildings and related infrastructures and a more detailed analysis of their operating costs. In a letter dated. 20 October 2010, PTA requested that Mila would provide a new cost analysis on this basis.

Mila submitted a revised cost analysis dated 17 November 2010 where it was stated that the company had reassessed buildings, support systems and facilities and had also revised its previous cost analysis in the light of the planned PTA decision which was announced by letter dated 20 October 2010.

The PTA endorsed the Mila assessment of the initial capital costs with the amendments stated in the Decision. The capex for facilities was valued at ISK [...][1] in the calculations for the tariff for lease of facilities, on the basis of average prices in 2009. Of this amount, investments in buildings totalled ISK [...] on the basis of replacement cost of assets and investment in masts was ISK [...].

The PTA used the annuity method and the same criteria when calculating the required rate of return as in prior Decisions by the Administration with respect to cost analysis. The PTA assessed WACC at 8.5% for Mila for the year 2009. The PTA furthermore rejected Mila's use of the cash flow methodology.

Operational costs of ISK [...] for 2009 were used as a basis where Mila costs for lease buildings were ISK [...].

The PTA accepted the Mila criteria with respect to standard units in calculations of space in cabinets but made amendments to the equivalence coefficient for facilities for optical connectors and for NMT Lease units.

Mila categorised lease of facilities by location, urban, rural and uninhabited areas, as is reflected in the tariff. Furthermore, Mila leases facilities for equipment which does not necessarily need to be located in Mila premises and in the opinion of the company, such leasing should not be subject to surveillance by the PTA. Mila categorised the locations which both had facilities that were subject to obligations and facilities that were not subject to obligations as "mixed market". The PTA made no comment on the Mila categorisation by market and area for the time being.

The PTA endorsed the Mila proposal for new discount terms which were based on duration of agreements rather than on units as had been the case at that time. New discounts were 5%-15% given 1-3 year lease agreements.

In accordance with prior Administration decisions on cost analysis, the PTA rejected Mila's claim for recalculation of the tariff on the basis of price changes up to the date of the Decision.

According to the conclusions of the PTA examination of the revised Mila cost analysis, total revenue from lease of facilities in buildings and masts was ISK [...] on an annual basis, of

[1] Information removed for reasons of confidentiality. The same applies to information in square brackets in this document.

which lease revenue from buildings was assessed as ISK [...] and from masts ISK [...]. In accordance with the above PTA calculations, the conclusion of the Administration was that the tariff for lease of facilities in buildings should increase in line with the weighted average by 2.8% and the tariff for masts by 12%. Calculated revenue according to the older tariff was ISK [...] per annum which means that the Mila revenue from lease of facilities increased by about 4.2%.

The monthly unit prices for lease of facilities were decided as follows and came into force on 1 March 2010:

Lease rental for facilities in buildings by location

Service	Mixed market	Urban area	Rural area	Uninhabited
1 Cabinet space 60x60x220...	13,995	20,349	22,081	36,971
1/2 Cabinet space 60x60x110...	6,997	10,174	11,040	18,486
1 Cabinet space 80x80x220...	22,392	32,558	36,329	59,154
1/2 Cabinet space 80x80x110...	11,196	16,279	17,665	29,577
Space for optical connectors 60x60x220...	6,997	10,174		
Square metre price ...	1,120	1,628	1,766	2,958

Discounts for lease in buildings
One-year agreement: 5% discount, one month rent for additional notice to quit period.
Two-year agreement: 10% discount, two month rent for additional notice to quit period.
Three-year agreement: 15% discount, three month rent for additional notice to quit period.

The exit fee is a charge made where an agreement on hosting is terminated before the agreed duration of the agreement has expired. The charge is added to the six-month notice to quit, see Article 16.3 in the agreement.

Lease rental for facilities on masts

Service	Price
Facility on timber pole <=12m...	5,900
Facility on timber pole >12m and on mast <12m...	8,400
Facility on mast 12-23m...	11,300

The service purchaser pays electricity costs directly for the operation of his equipment.

1.3 Facts of the case

In the Decision of the PTA no. 41/2010 it was stated that Mila was working on a review of the structure of its tariff for lease of facilities on masts where the price would be decided by the location of lease units on the mast and by their size. As it was considered a major and time-consuming task to make a breakdown of lease units on Mila masts, a temporary tariff for lease of facilities on masts was decided, which would be in force until the reviewed tariff was available.

In an email from 10 August 2012 to Mila, the PTA requested information on the status of this work at Mila. In the Mila reply from 15 August 2012 it was stated that this work had been delayed because of the transfer of the trunk line network to Siminn which meant that other tasks were given priority.

In a letter from the PTA dated 4 January 2013 the Administration gave Mila an extension to 4 April 2013 to submit a tariff for lease of facilities on masts. With a letter dated 18 March 2013, Mila requested a further extension to submit a cost analysis for hosting on masts. It was stated in the Mila letter that there was considerable work involved in defining lease units and finding their height and size on the masts. There had also been a need to make system changes in the bookkeeping system in order for it to be possible to register the height and size of antennae. The PTA extended the notice until 7 June 2013.

With a letter dated 7 June 2013, the Administration received a communication from Mila along with a cost analysis for hosting on masts based on the operating year 2012.

In accordance with the conclusion of the cost analysis, Mila requested authorisation from the PTA to increase the lease price for hosting in buildings and for amendments to the structure of lease price for hosting on masts. In the opinion of the Mila the price increase averaged [...].

More detail is provided in the appropriate chapters here below on specific issues in the Mila analysis and on the position taken by the Administration, such as on rate of return requirement, operational costs, investments and lease units.

1.4 National consultation

The PTA opened a national consultation on the preliminary draft to the Decision here under discussion on 28 January 2014 and the consultation ran until last 21 February. Comments were received from Fjarskipti ehf. (Vodafone), Icelandic Federation of Labour and the Telecommunications Fund. Comments by stakeholders and conclusions of the national consultation can be found in Appendix II. In light of comments made in the consultation process, the PTA made minor alterations to the cost analysis which resulted in a small decrease in hosting prices. The resulting prices in Appendix I include these changes.

2. The PTA conclusion

2.1 In general on the Mila cost analysis

It was stated in the Mila cost analysis that the lease price for hosting in buildings was calculated using the same methodology as in the cost model from the year 2010. Minor amendments were however made on the division of costs between masts and buildings and the allocation of shared costs was slightly altered.

In addition to this it was stated that the structure of the tariff for lease on masts had been amended such that the lease price was now divided into 4 categories by the size of the leased unit and its location in the mast. Lease prices had been calculated for urban areas, rural areas and non-inhabited areas.

Mila leased hosting in about 540 buildings and equipment space and about 400 masts. Some of the equipment space from which Mila received revenue was owned by other parties such as [...]. That space was solely leased to Siminn and within Mila, but Mila is responsible for operating all of the group’s equipment space.

Mila specified that direct costs were allocated to the building in question and shared costs were divided in a specific manner depending on the nature of the costs. Shared costs were about [...] of operational costs, excluding interest and depreciation. The buildings were divided into 4 categories, buildings in urban areas, in rural areas, in uninhabited areas and hosting halls (previously classified as “mixed market”).

Mila had decided that the division of costs between masts and buildings would be according to the same proportions as in the analysis from the year 2010.

The investment cost was based on calculation of replacement cost which was calculated for Mila in the year 2010 where the resulting figure was indexed to the end of 2012, but the investment for the access control system and the system for monitoring buildings was based on real costs. The investment cost of masts was based on the indexed replacement cost from the 2010 cost model. Mila indexed the investment cost to the end of 2012 using the building price index. In the opinion of Mila it was normal to index the investment to the end of the year instead of using the average price level of 2012 as one was calculating revenue (tariff) which was to meet current costs. Mila pointed out that the operational cost for hosting followed general price increases and for this reason it was normal that the amounts were calculated to the price which was closest to the day on which the price is decided.

Mila indexed operational costs for the year 2012 from the average price of 2012 to the end of the year.

In the Mila analysis it was stated that Lease unit equivalents were calculated. For buildings the same methodology was used as in the analysis from 2010. Leasing on masts was divided into 4 categories where each category was based on a specific size in Square metres and position on the mast. The categories were divided as follows:

	0-0.24	0.25-0.74	0.75-2.6	Over 2.6
Over 20 m	2	3	4	4
10-19.9 m	1	2	3	4
0-9.9 m	1	1	2	3
On building	1	1	2	3

Square metres

This means that lease units that are at a height of 8 m and are 0.5 m² in size are in Category 1 while lease units larger than 2.6 m² and at a height of 25 m are in Category 4.

When deciding the weighting for each category, the current tariff was taken into account and also the leasing price in Norway.[2] It was clear that the size and location on the mast had a significant impact on mast costs and on the capacity to lease to others at a similar location. For example a parabolic antenna at the top of a mast would be subject to much higher wind stress than if it were positioned lower on the mast and in addition to this one must take into account that at higher levels on a mast there is less space available to lease more units. It was thus normal that the lease price should be higher as the surface area of lease units becomes larger and as its location on the mast is higher.

It was stated in the Mila analysis that the company Jara[3] had varying lease prices depending on whether the antennae were parabolic, panels or Yagi directional antennae. Mila had decided for the sake of simplicity to have one price which depended on size. Jara has more categories depending on height and allows for larger units. The largest unit leased by Mila is 14 m² but it is an absolute exception if a unit exceeds 7 m².

Mila has decided to have the categorisation somewhat simpler than the Jara arrangement and to have a smaller difference between the least expensive and most expensive categories. Lease units in Category 1 had coefficient 1, in Category 2 coefficient 2, in Category 3 coefficient 3 and in Category 4 coefficient 4. Category 4 was thus four times more expensive than Category 1.

In Sections 2.2 to 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 hosting. The factors in question are the following:

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2 *https://jara.no/Images/Telelosji%20Bilag%203%20Priser%20og%20prisforutsetninger%2001072013_tcm55-226501.pdf*

3 See: https://www.jara.no/.

- Weighted average cost of capital WACC
- Operational costs
- Investment costs
- Lease units
- Summarised conclusion

Each 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.

2.2 Weighted average cost of capital (WACC)

2.2.1 Mila cost analysis

The following was stated in the Mila communication dated last 7 June:

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

		2012
Risk-free rate ...		3.48%
Debt premium ...		3%
	Cost of debt	*6.48%*
Market risk premium...		5.00%
Unlevered beta...		0.5
Levered beta...		0.72
Equity...		0.65
Liabilities/Equity...		0.54
Other risks (alpha)...		0.00
Tax proportion ...		0.20
	Required rate of return after tax	*7.06%*
	Required rate of return pre-tax	*8.82%*
	WACC pre-tax	**8.00%**

The calculation method applies the same methodology as before. 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 WACC for local loops which was sent to the PTA earlier this year."

2.2.2 The position of the PTA

In Article 16 of Regulation no. 564/2011 on accounting and cost analysis in the operations of electronic communications undertakings it is stated that the costs of capital tied up 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 required rate of return on equity and the required rate of return on debts in accordance with Regulation no. 564/2011. The CAPM model (Capital Asset pericing 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 rate of return shall be calculated as the sum of risk-free interest and interest premium which reflects normal mark-up by companies on the market. A more detailed description of calculations of the WACC and of rate of return on equity can be found in an appendix to Regulation no. 564/2011. The PTA shall decide at least once a year the WACC for specific financial markets based on market mark-up, economic indebtedness and the position with respect to working capital and debts.

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

Calculation of WACC

WACC	***2012***
Risk-free rate	3,48%
Unlevered beta	0,50
Levered beta	0,72
Debts/equity ratio	0,54
Market risk premium	5,00%
Cost of equity	**7,06%**
Risk-free rate	3,48%
Debt premium	3,00%
Cost of debt	**6,48%**
Interest bearing debt %	35%
Equity %	65%
Corporate tax rate	20%
Cost of dept, post-tax	5,18%
Cost of equity, post-tax	8,82%
WACC (pre-tax)	**8,00%**

Evaluation of WACC real for Mila is 8.00% for the year 2012 in calculations of costs of capital tied in assets used in connection with the company's provision of services. The position with respect to working capital and debts is not taken into account in the PTA calculations in this instance.

2.3 Operating costs

2.3.1 Mila cost analysis

The following was stated in the Mila communication dated last 7 June:

“Comparison of operational costs between years

The cost analysis of hosting that was submitted in the year 2010 was based on operational costs for the year 2009 and was at the average price level of that year. In calculations of operational costs, shared costs were divided between buildings (and those buildings that belong to the Telecommunications Fund highway tender were deducted). In addition to this, electricity costs were not included in the analysis.

During the period 2009 to 2012 the building cost index has risen by about 19% which harmonises with the increase in operational costs for hosting during this period which have risen by about [...].

The division of operational costs are now done in a different manner than in the last cost analysis where there were more items categorised as “Other costs” than is currently the case. Here below one can see the division of operational costs for the year 2009 as in the 2010 cost model and the division after adjustment to the division used in this cost model:
[...]

Operational costs for hosting for the past 4 years is as follows:
[...]

Electricity costs are not part of this analysis as the leasing parties pay for electricity in accordance with consumption.

Division of operating costs on areas

Mila categorises all its equipment space in the same manner as in the previous analysis, that is to say in hosting halls in the capital city area and in Akureyri (previously called “mixed market”), in urban areas, rural areas and equipment space outside inhabited areas.

The costs are divided in the following manner into areas: [...]

Costs allocated equally to buildings are divided as follows: [...]

By far the largest constituent in other costs is telephone costs, as telephones are located in all of Mila’s equipment space. Because of security considerations, Mila has chosen to install fixed line telephones in its equipment spaces. Maintenance costs which are not directly allocated to a building are per diem, inspections and work in connection with weather risk warning.

Costs that are allocated to buildings in the capital city area are costs for inspectors of buildings in the capital city area.

Costs that are divided 50% by building and 50% in proportion to the number of bookkeeping records for each building are for services purchased from Skipti, mainly bookkeeping services. This is mainly costs for bookkeeping services and other services provided by Skipti to Mila. A large part of the costs is directly related to the number of bookkeeping entries. It is *thus normal that buildings that have many entries in the bookkeeping, bear costs in proportion to these entries.*

Equalising charges, opex and licence charges are divided in proportion with revenue for each building.

Senior management and support department costs and internal work which does not belong to specific buildings is divided such that 70% is divided equally between buildings and 30% in the same proportion as revenue for each building. This cost is to a large extent shared cost as work is to a large extent for all the building units but it is however clear that management related to hosting revenue is greater when revenue is higher. Mila thus considers it normal that about 30% of these costs are dependent on revenue for the buildings.

Mila projects operational costs to the price level at end of year 2012. Total operational costs apart from the Telecommunications Fund highway tender building are ISK [...].“

2.3.2 The position of the PTA

PTA bases its opinion on information submitted by Mila. The PTA also uses data from separation of accountancy in Mila operations resulting from the obligation for separation of accountancy, and also from operation of Mila local loops and leased lines.

Mila provided a breakdown of information on the company’s hosting opex in 2012 with notes on individual cost items and on the development of individual cost items since the last cost analysis was made on the basis of 2009 operations.

Opex for 2012, which is included in the tariff for hosting, amounts to a Total of ISK [...]. As this cost analysis does not include hosting of facilities which are a part of the Telecommunications Fund highway tender (GSM I), the cost of this access to the amount of just under ISK [...] was not included.

Mila then indexed its opex for 2012 to the end of year price level for the same year and this increases opex by 5.2% to the amount of ISK [...] which Mila uses as a basis for its price calculation. Electricity costs are not included in the above specified cost figures as they are paid by the leasing parties according to consumption.

Mila divides opex for facilities in the same manner as previously, by location (urban, rural and uninhabited areas) and on the basis of whether the leasing is in the same premises where leasing not subject to obligations also takes place. Such locations are categorised by Mila as “halls” (previously named “mixed market”) and are only in urban areas. This applies to total costs for facilities in buildings and masts.

Division of the opex for 2012 between areas [...]

The increase in the opex for hosting for the period 2009 to 2012 which is used as a basis for the tariff for leasing of buildings and masts is about [...]%. At the same time the building price index increased by about 17% which has a direct impact on rental prices and the consumer price index increased by about 15%.

Development of opex 2009 to 2012[...]

PTA rejects the Mila projection of opex to the end of year price level of 2012 and instead real opex will be used as a reference. The PTA repeats that cost analysis based on historic costs is dependent on all amounts being at the price level of the year that is being analysed.[4] Other cost criteria also relate to the year in question, including real opex for the year, investments, lifetime, WACC and other factors related to the year in question. The PTA considers it to be more appropriate for there to be regular review of cost analysis for hosting than to authorise indexed price increases that do not necessarily reflect changes in underlying costs.

In other respects the PTA endorses the cost basis for hosting as submitted by Mila. Total opex for the year 2012 shall be estimated at ISK [...] which will be applied to the Mila operations.

2.4 Investment costs

2.4.1 Mila cost analysis

The following was stated in the Mila communication dated last 7 June:

"Mila investment in hosting is divided into the following categories of investment:

1. *Buildings, divided into concrete or timber buildings*
    a. *security systems and buildings*
    b. *ventilation system*
    c. *refrigeration equipment*
    d. *diesel engines*
    e. *emergency power generators*
    f. *key system*
    g. *building surveillance system*
2. *Masts, divided into timber and steel masts*

Buildings

The assessment of historic price of equipment space is based on the same methodology as was used as a basis for the 2010 cost analysis where the Efla civil engineering company calculated GRC for Mila buildings. The conclusion according to the Efla methodology is projected to the end of 2012. Mila considers that no fundamental change has taken place to

[4] PFS refers among other things to its decision no. 1/2009 on the reference offer for open access to local loops and to the decision of the Appellate Committee for Electronic Communications Postal Affairs no. 2/2009 because of the decision there to confirm the PTA conclusion. The PTA also refers to its Decision no. 13/2009 with respect to cost analysis for open access to copper local loops and the decision of the for Electronic Communications Postal Affairs no. 4/2009 for the decision where the PTA conclusion was confirmed.

the cost price of buildings since the year 2010 and therefore considers there be no need to repeat price estimates for all cost factors.

One amendment has however been made to the calculation for electrical service line and tracks (unmade roads). Mila has decided to reduce investment costs for electrical service line and tracks by about [...]. The reason is that a third party assessment of investment costs at a specific location took into account that expenditure was not necessary for laying tracks and installing electrical service line as existing investments could be used.

In the 2010 calculations, a number of buildings owned by Mila were missing and in addition to this two buildings were counted twice in the model.

The building at Skólavegur 55 in Fáskrúðsfjörður was purchased and buildings to house equipment were constructed at Árnes, Gillastaðir, Kjörvogur, Rauðaskriður and at Hnjúkar and space was developed for an emergency generator at Ármúli 31.

Ventilation systems in the following equipment buildings were enlarged during the years 2010-12:

Skaftafell, Hæðir	*Skaftafell, Hæðir, increased to 500 m3/h.*
Hunkubakkar	*increase up to 500 m3/h.*
Miðbraut 13, Búðardalur	*increase up to 2,500 m3/h.*
Húnabraut 15, Blönduós	*increase up to 2,500 m3/h.*
Hafnarbraut 26, Dalvík	*increase up to 2,500 m3/h.*
Fagurhólsmýri	*increase up to 500 m3/h.*
Ægissíða, Grenivík	*increase up to 500 m3/h. (in leased building)*
Engihjalli	*increase up to 500 m3/h.*
Úthlíð	*increase up to 500 m3/h.*

Locations where ventilation was increased to 500 m^3/h, the addition was entered unchanged into the model but where the increase was up to 2500 m^3/h an addition from 700 m^3/h to 1100 m^3/h was recorded. The reason is that real investment was much lower than the calculation of GRC for assets as it was possible to use the existing investment to some extent.

Several emergency generators were not in the model from 2010.

Replacement cost was calculated according to the price level in November 2010 as has been stated. This replacement cost is indexed to the end of year 2012.

Replacement cost of investments without building surveillance and key systems at the price level of November 2010:[...]

Access management system

Mila has installed access management systems in more than [...] buildings in the south-west region of the country. The investment was just under ISK [...] in 2011 and just under ISK [...] in 2012. Indexed to the end of 2012, this investment amounts to ISK [...]. The number requiring a change of lock varies by building. Each replacement set costs from ISK [...] to almost ISK [...]. The initial cost including installation for each door is in the range of ISK [...] to ISK [...] where the required investment depends on the one hand on the type of lock and the distance from Reykjavík. The total initial investment costs that can be attributed to the doors is just less than ISK [...]. The remainder is divided equally between the buildings.

[...]

Figure 1. Map of the area where access management systems have been installed

Building surveillance system

Mila has installed building surveillance systems in [...] buildings. The investments include both centrally located equipment and equipment installed in each building. Calculations of the initial investment use the real price for each building and the investment for central equipment is divided equally between the buildings. These investments are projected to the end of year 2012.

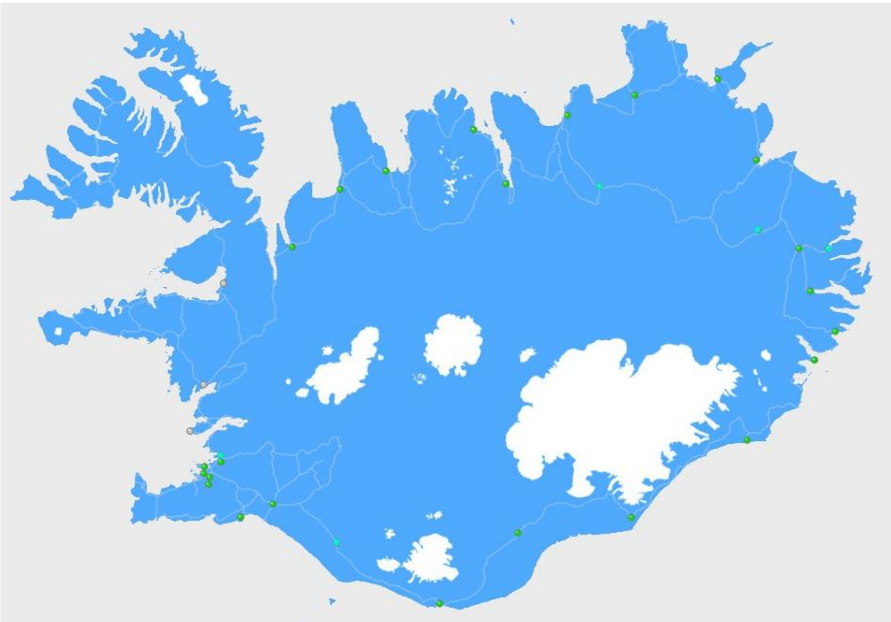

Figure 2. Map of area where building surveillance systems have been installed

Total investment for buildings

Here below one can see the investment for buildings indexed to end of year 2012: [...]

Masts

The gross replacement cost of masts is calculated in the same manner as in the cost model from 2010. The unit price is projected from November 2010 to the end of year 2012. [...]

In the period 2011 to 2012 Mila invested in fall safety equipment which was fitted on a number of masts. This investment of ISK [...] is added to the initial investment of the masts in question: [...]

Replacement cost for masts at end of 2012: [...]

Annuities of investments

Annuity of investments is calculated given 8% WACC and the same estimated lifetime of assets as in the 2010 cost model.

Annuities of buildings: [...]

Annuities of masts: [...]

2.4.2 The position of the PTA

In Article 32 of the Electronic Communications Act no. 81/2003 it states that the PTA can demand that calculations of costs take into account the operations of analogous services that are considered to be efficiently run and can use cost analysis methodologies that are not related to methodologies employed by an electronic communications company. Furthermore it states in Regulation no. 564/2011 that when capex is based on historical costs the PTA shall for the purposes of comparison have the estimated investments that would result from an efficiently operated electronic communications company in the field in question.

Mila investments are assessed by taking into account replacement cost which is based on the same methodology as the PTA used in its Decision no. 41/2010 and reference is made to this Decision with respect to further discussion on the PTA criteria and conclusion. Some additions and amendments have been made for specific assets but the capex is nevertheless mostly as in 2009.

The Mila conclusion is that the capex for buildings is ISK [...], indexed to the price level at end of year 2012. The indexed capex of masts with additions during the period is assessed as ISK [...].

The PTA accepts the Mila methodology with respect to capex as it is based on the PTA Decision no. 41/2010. On the other hand the PTA rejects the Mila indexation of capex to the price level at end of year 2012 and instead requires that the average price level for 2012 be used. The PTA repeats that cost analysis based on historical costs is dependent on all amounts being at the price level of the year that is being analysed.[5] Other cost criteria also relate to the year in question, including real opex for the year, investments, lifetime, WACC and other factors related to the year in question. This is not altered in any way even though assets are assessed at replacement cost as such an assessment by Mila is based on the company's capex. The PTA considers that assets are being revalued at the price level of the year being assessed in each instance and that all are based on the development and operations of Mila during the underlying year of analysis.

The PTA considers it to be more appropriate for there to be regular review of cost analysis for hosting than to authorise indexed price increases that do not necessarily reflect changes in the underlying costs.

The basic investment in buildings and related systems is estimated at ISK [...][6] at the average price level of the year 2012, and the investment base was estimated at ISK [...] in the previous analysis for the year 2009 and has thus increased by about [...] during the period.

Overview of lifetime of buildings, replacement cost[7] and division in area categories [...]

Initial investment on masts is estimated at ISK [...] at the average price level for 2012, when capex was ISK [...] in 2009 and has thus fallen by about [...] during the period 2009 to 2012.

Overview of lifetime and replacement cost of masts by type and area [...]

The PTA conclusion is that the investment base for facilities in buildings shall be assessed as ISK [...] and for masts at ISK [...] in this cost analysis. This means that the Total value used as capex for facilities is ISK [...] at the price level for 2012, which is used for the basis of calculations for the tariff for lease of facilities in buildings and masts.

When evaluating annual investment costs the annuity method is used which is based on the above specified capex and the estimated lifetime as well as 8% WACC on capital tied in investments. The following table shows the conclusions of calculations of annuities for investments in buildings and masts.

Overview of anuities for buildings [...]

Overview of annuities for masts [...]

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[5] The PTA refers among other things to its Decision no. 1/2009 on a reference offer for open access to local loops and to the ruling of the Appelate Committee for Electronic Communications Postal Affairs number 2/2009 with respect to this Decision. The PTA also refers to its Decision number 30/2009 with respect to open access to local loops and to the ruling of the the Appelate Committee for Electronic Communications Postal Affairs no. 4/2009 with respect to that Decision.

[6] The estimated investment cost decreased slightly (less than 1%) due to adjustments made by the PTA in light of comments in the national consultations.

In total, the annuity for buildings is about ISK [...] and for masts it is about ISK [...].

2.5 Lease units

2.5.1 Mila cost analysis

The following was stated in the Mila communication dated last 7 June:

"Mila calculates the number of lease equivalents according to specific criteria. As the structure of mast leasing is being changed, Mila considers it simplest to use the status of units from June 2013. Mila therefore calculates the unit price from quantity figures in June 2013, and not the average status in 2012. Revenue in June 2013 was slightly higher than the average in 2012 which therefore leads to a slightly lower unit price than if one used the average number in 2012 as a reference.

Buildings

As was stated in the discussion on the development of the model, the same calculation methodology is used for the number of lease units as was used in the cost model from the year 2010.

Here below one can see the number of lease units in each category in June 2013.

number of lease units	Halls	Urban area	Rural area	Uninhabited
Cabinet space 60x60x220...	624	1.210	836	227
Cabinet space 80x80x220...	408	240	54	0
Space for optical connectors 60x60x220...	7	82	6	0

Leased space 60x60 cm^2 has the coefficient [...], 80x80 cm^2 has the coefficient [...], leased space for optical connectors and in cable cellars has the coefficient [...] (given 60x60 cm^2) [...].

A half shelf unit has a 50% lower equivalence than a whole unit.

Lease units with 15% discount are calculated as 85% of lease units with no discount.

Here below one can see the number of lease equivalents in June 2013: [...]

Lease equivalents have increased by about [...] since the price for hosting was last calculated. [...].

Masts

Leasing of units on masts was divided into 4 categories where each category was based on a specific size and position on the mast. Given that the higher the lease unit is located on the mast, the higher the price will be and also that the larger the surface area of the unit the higher the price. A large parabolic antenna at the top of a mast is thus much more expensive than a small unit at a low position on the mast. The categories are divided as follows:

	0-0.24	0.25-0.74	0.75-2.6	over 2.6
Over 20 m	2	3	4	4
10-20 m	1	2	3	4
0-9.9 m	1	1	2	3
On building	1	1	2	3

Square metres

Up to 0.25 m² are in Category 1 up to 20 m they are in Category 2 if they are positioned higher than 20 m.

Lease units from a size of 0.25 to 0.75 m² are in Category 1 up to a height of 10 m but are in Category 2 if they are located at a height of between 10 and 20 m and in Category 3 if they are above 20 m.

Lease units from a size of 0.75 to 2,6 m² are in Category 2 up to a height of 10 m but are in Category 3 if they are located at a height of between 10 and 20 m and in Category 4 if they are above 20 million

Lease units larger than 2.6 m² are in categories 3 up to 10 m and in Category for if they are located above 10 m.

When deciding the weighting of each individual category the current tariff was taken into account as was also the price for leasing in Norway, see discussion on the development of the model in Section 3[8] *here above. It is clear that the size and location on the mast has a significant impact on mast costs and on the capacity to lease to others at a similar location. For example, a parabolic antenna at the top of a mast would be subject to much higher wind stress than if it were positioned lower on the mast and in addition to this one must take into account that the higher one goes on a mast the less space is available to lease more units. It was thus normal that the lease price should be higher as the surface area of a lease unit becomes larger and as its location on the mast is higher.*

Mila proposes that a price be offered for 4 categories in accordance with Section 3 here above on the development of the model where the weighting for Category 1 is 1, Category 2 is 2, Category 3 is 3 and Category 4 is 4.

The tariff allows for the same kind of discount terms as in hosting in buildings. As almost all parties that lease from Mila have requested a 15% discount with three-year agreement, it is assumed that all leasing parties will have a 15% discount when calculating lease equivalents.

[8] Section 2.1 in this document.

There is no plan for a special price for leasing on masts that are located at hosting halls. The reason for this is that Mila considers that the operation of size of these masts is analogous to masts in urban areas and for this reason the masts located at hosting halls are categorised as masts in urban areas.

The number of lease equivalents on masts is as follows: [...]

2.5.2 The position of the PTA

Mila bases the number of lease units on the status of such units in June 2013 and uses this number as a basis for calculating lease price. In the Mila analysis it is stated that this is done because of changes to the structure of leasing for masts that Mila has prepared and for this reason it was simpler to use June 2013 as a reference rather than the average for the year 2012.

As is stated here above, this change in the structure of leasing for masts called for work on the part of Mila in the definition of lease units and in finding their height and size on the masts. This work has been in progress until this year. The PTA raises no objections to the use of the number of lease units in June 2013 as a reference.

The number of lease units is similar to the average in 2012 which means that this arrangement will not lead to a higher unit price.

Mila calculated the number of lease units both for facilities in buildings and on masts.

Buildings

Mila based its calculations on the number of lease unit equivalents on the methodology presented in the PTA Decision no. 41/2010. Each lease unit is given a different weighting or equivalence depending on its characteristics. The standard unit was decided as a cabinet with the dimensions 60*60*220. That is to say 60 cm in length and width and 220 cm in height. This unit has the equivalence 1.0. Other units such as 80*80*220 cabinet units and half units have a weighting which is in the same proportion as their volume to the volume of the standard unit.

Overview of lease units and equivalents in buildings [...]

Number of lease units and lease equivalents for individual services are shown in the table below.

Overview of number of lease units [...]

Overview of number of lease equivalents [...]

According to Mila calculations the total number of lease units in buildings is [...] and the number of lease equivalents totals [...] that are used as a basis for calculating lease price in this cost analysis. Lease equivalents were [...] in the previous analysis and have thus [...] in the period 2009-2012. [...]

The PTA makes no comments on the number of lease equivalents used as a basis for the Mila calculations of tariff for lease of facilities in buildings. The calculations for discounts allow for service purchasers making a three-year agreement for lease of facilities. The number of equivalents for calculation of tariff for facilities in buildings totals [...] after having taken discounts into account.

Masts

In accordance with the discussion in PTA Decision no. 41/2010, Mila has submitted a new structure for the tariff for facilities on masts where price is determined by the location of lease units on masts and by their size.

Mila proposes that leasing of units on masts be divided into 4 categories where each category is based on a specific size and location on the mast. The rule is that price increases with the height of the lease item on the mast and with the size of the surface area of the unit.

Overview of division into groups

Location/surface area	0-0.24	0.25-0.74	0.75-2,6	over 2.6
20 m and higher	2	3	4	4
10-19.9 m	1	2	3	4
0-9.9 m	1	1	2	3
On building	1	1	2	3

Overview of number of lease units on masts [...]

Overview of number of lease equivalents on masts [...]

The PTA makes no comment on the new presentation of the Mila tariff for facilities on masts, nor with the number of lease equivalents used as a basis for the Mila calculations of tariff for lease of facilities on masts. The calculations for discounts allow for service purchasers making a three-year agreement for lease of facilities. The number of equivalents for calculation of tariff for facilities on masts totals [...] equivalents after having taken discounts into account.

2.6 Total costs

2.6.1 Mila cost analysis

The following was stated in the Mila communication dated last 7 June:

"Total cost for hosting

The total cost for hosting is as follows: [...]

The conclusion from the 2010 cost analysis was that calculated revenue should be ISK [...]. Given this conclusion the requirement for increase is [...]. Revenue for 2013 is [...].

[...]

Division of costs between lease on masts and buildings

Mila calculated the division of costs between lease on masts and buildings in the same manner as in the 2010 cost analysis. The conclusion from this division was that [...].

The table below shows the division of total costs for hosting if the same methodology is used as in the 2010 cost analysis: [...]. In the opinion of the Mila there is too great an increase in buildings in uninhabited areas in comparison with urban and rural areas. In the 2010 cost analysis complaints were received about the price of leasing buildings in uninhabited areas and this led to Mila categorising some buildings in uninhabited areas as being in rural areas. In Mila's opinion it is important that there should not be a significant difference in price changes of individual categories.

If one uses the same proportional division of costs between masts and buildings as in the 2010 cost analysis then the lease price in uninhabited areas will not be as high.

Mila therefore proposes the following division of total costs: [...]

2.6.2 The position of the PTA

The PTA makes no comment on Mila using the same proportional division of costs between masts and buildings as was used in the 2010 cost analysis. The division will then be as follows:

Division of costs [...]

2.7 Lease price

2.7.1 Mila cost analysis

The following was stated in the Mila communication dated last 7 June:

"Buildings

Total cost per annum: [...]

Number of lease equivalents: [...]

According to the above the lease price for hosting in buildings is as follows: [...]

Masts

Calculation of lease price: [...]

Lease price will be as follows: [...]

As can be seen from the table here above the price for hosting is almost the same for urban as for rural areas. Despite this fact, Mila wishes to retain the categories urban and rural for the time being, but Mila proposes that the same price be used for both areas [...]"

2.7.2 The position of the PTA

The PTA accepts Mila's methodology and conclusion in cost analysis of tariff for the lease of facilities in Mila's buildings and masts, with the amendments that were made in the processing of the cost analysis as shown here above. The Mila analysis is fundamentally based on the criteria shown in analysis of lease of facilities in the PTA Decision no. 41/2010.

Mila divides capex and opex between hosting in buildings and masts on the basis of the share of buildings and masts in real lease revenue in the year 2012.

PTA has scrutinised the Mila revised cost analysis and has recalculated on the basis of the amendments that the PTA considers appropriate to make to the criteria for the calculation. PTA also made slight adjustments following the comments received in the consultation process. The PTA conclusion is that total Mila lease revenue needs to amount to [...] on an annual basis which is equivalent to an [...] % increase from current lease revenue.

Overview of total costs of facilities in buildings and masts [...]

Buildings

The following is the conclusion on lease price per month for facilities in buildings, but based on the same methodology as in the PTA Decision no. 41/2010 on division into areas, and on size and characteristics of lease units.

Lease for facilities in building

Category	Halls	Urban area	Rural area	Uninhabited
Cabinet space 60x60x220..........................	17,004	21,362	22,785	39,671
Cabinet space 80x80x220..........................	27,206	34,180	36,457	63,474
Space for optical connectors 60x60x220....	8,502	10,681	11,393	19,836
Square metres	1,360	1,709	1,823	3,174

Masts

Mila proposes that leasing of units on masts be divided into 4 categories where each category is based on a specific size and location on the mast. Given that the higher the leased unit is on the mast, the higher the price will be and also that the larger the surface area of the unit the higher the price.

The categories are divided as follows:

	0-0.24	0.25-0.74	0.75-2.6	over 2.6
20 m and higher	2	3	4	4
10-19.9 m	1	2	3	4
0-9.9 m	1	1	2	3
On building	1	1	2	3

Square metres

1. Lease units up to 0.25 m² are in Category 1 up to 20 metres but are in Category 2 if they are positioned at 20 metres or higher.
2. Lease units from a size of 0.25 to 0.75 m² are in Category 1 up to a height of 10 m but are in Category 2 if they are located at a height of between 10 and 20 m and in Category 3 if they are at 20 metres or higher.
3. Lease units from a size of 0.75 to 2,6 m² are in Category 2 up to a height of 10 m but are in Category 3 if they are located at a height of between 10 and 20 m and in Category 4 if they are at 20 metres or higher.
4. Lease units larger than 2.6 m² are in Category 3 up to 10 m and in Category 4 if they are located at 10 metres or higher.

The tariff allows for the same kind of discount terms as in hosting in buildings. As almost all parties that lease from Mila have requested a 15% discount with three-year agreement, it is assumed that all leasing parties will have a 15% discount when calculating lease equivalents.

The PTA accepts the above specified Mila categorisation of lease units on masts.

The following is the conclusion on lease price per month where the categories “urban” and “rural” have been merged in accordance with the Mila request, as the difference in price is very small.

Lease rental for facilities on masts

Category	Urban area	Rural area	Urban and rural	Uninhabited
Category 1	4,901	4,871	4,886	6,532
Category 2	9,802	9,742	9,772	13,063
Category 3	14,702	14,613	14,658	19,595
Category 4	19,603	19,485	19,544	26,126

Mila requested that in the tariff, the calculated unit price would be rounded up to the next hundred. The tariff as a whole is in Appendix I where the above specified unit prices are rounded up to the next hundred, where applicable.

2.8 Summarised conclusion

Prices for lease of facilities (hosting) based on historic costs for 2012 in accordance with the company's obligation for price control can be found in the above specified Mila cost analysis that was received by the PTA for discussion. When a tariff is based on historic costs, the burden of proof that the tariff is based on costs rests on the electronic communications company in question, see Paragraph 2 of Article 32 of the Electronic Communications Act no. 81/2003. The matter in hand here is the lease of facilities that cover Markets 4, 5, 6 and the older Market 14 and also services that may not be subject to the PTA price control.

It is the opinion of the PTA that the basis provided in the PTA Decision no. 41/2010 is the basis for the methodology used in the revision of the Mila tariff for hosting.

The cost analysis covers hosting in buildings and masts. This cost analysis does not cover electricity costs as the leasing party pays for electricity in accordance with consumption.

The PTA endorses the Mila conclusion with respect to changes in criteria and methodology for the tariff for lease on masts. The discount terms that apply to buildings shall also apply for masts. Discounts will be 5%, 10% or 15% depending on the length of the agreement being 1, 2 or 3 years in each instance.

The PTA agrees in all main respects to apply the Mila cost analysis as a basis for calculation of a new tariff for hosting in the company's buildings and masts as the cost analysis harmonises in most respects with the prior PTA Decision no. 41/2010.

On the other hand the PTA does not accept the indexation of operational and investment costs to the end of year 2012 as proposed by Mila. The PTA refers to its prior arguments in this connection which among other things are stated in the PTA Decision no. 41/2010.

In total it is calculated that Mila revenue from leasing in buildings will increase by about 8.1% as a result of cost increases during the period 2009-2012. The increase in the price of leasing varies significantly according to region where the factor carrying the most weight is the change in the number of lease units in the regions in question since the last cost analysis which was based on the year 2009 and in addition to this there are the cost increases during the period 2009-2012. [...]

In total it is calculated that Mila revenue from leasing for masts will increase by 8.6% given revenue according to the existing tariff.

One can assume that total Mila lease revenue will increase by about 8.2% on an annual basis given revenue according to the existing tariff. By comparison one can mention that during the period 2009-2012 the building price index increased by 17% and the consumer price index increased by 15%.

2.8.1 Annual review of the Mila wholesale tariff for hosting

Regular review of the Mila cost analysis along with clear criteria on which the cost analysis is based are intended to ensure balance in the recovery of costs and to support a clear, transparent and predictable structure, in order to strengthen competition, new investment and innovation.

In order to ensure predictability and transparency in the tariff for hosting in each instance, the PTA will review the Mila cost analysis in question annually in accordance with the following main principles while the obligation for price control is in force on a company with significant market power on the market for access to buildings and masts. The next review of tariff will be in 12 months and then annually after that point in time.

2.8.2 Main rules for cost analysis methodology

When reviewing cost analysis for the Mila tariff for hosting[9] the following main rules shall be applied:

- The cost analysis shall cover the leasing of facilities in Mila buildings and masts.
- Price shall be calculated for location-based access to buildings and masts. Mila shall divide investments in buildings and masts into categories depending on whether the investments belong to mixed hosting operations (halls), urban areas, rural areas or uninhabited areas.
- In addition to the above the Mila tariff shall contain as a minimum the price for varying lease units and shall cover all hosting services provided today to its own service departments or to other related parties or parties cooperating with Mila and to other electronic communications companies. Leasing on masts shall be divided into categories where each category is based on a specific size in square metres and position on the mast.
- The cost base shall be Mila historical costs (HCA) based on the preceding financial year in each instance.
- The methodology shall be based on allocating all costs to the service in question (FAC).
- Allocation of costs are based on separation of accountancy, on Mila asset bookkeeping and on costs from the company’s bookkeeping system where opex are entered by bookkeeping account.
- The operational costs (OPEX) of hosting service shall be captured, including the share in indirect costs, that is to say management and IT in accordance with separation of accountancy.
- When calculating investments (CAPEX) the replacement cost of operational assets shall be used where current cost or assessment of replacement cost of assets is taken into account in each instance.
- Evaluation of the lifetime of operational assets shall reflect the economic lifetime. The references shall be that timber buildings have a 30 year lifetime, concrete buildings have

[9] The following does not apply to hosting spaces of the highway tender (GSM I) which were subsidized by the Telecommunications Fund.

a 50 year lifetime, building surveillance systems have a 6.67 year lifetime, ventilation systems have a 15 year lifetime, refrigeration equipment has a 10 year lifetime and diesel engines have a 13-25 year lifetime.

- The tilted annuity depreciation method shall be used to calculate annual costs for operational assets.
- The cost of the total number of hostings in buildings and masts shall be calculated.
- Real return on investment shall be used as a reference, based on WACC real[10] of capital tied up in assets used in connection with providing service where the risk premium reflects the risk related to operations on the relevant market.
- The average unit price for individual hosting units in lease of facilities shall be calculated as the average cost for specific regions on the basis of allocated opex and capex having taken into account varying services, the number of lease units and their size. It is authorised to use equivalents to decide unit costs.

The PTA furthermore intends to prescribe analogous main principles in describing the implementation of cost analysis for local loop, bit stream and leased line markets in the obligations for access to facilities and on price control in a new market analysis for the markets in question which is currently being made and which is planned for completion with final decisions in the first half of 2014.

[10] Pursuant to Article 16 of Regulation no. 564/2001, the PTA decides annually the return on capital requirement (WACC) which electronic communications companies shall use as a reference in their calculations.

PÓST- OG FJARSKIPTASTOFNUN

The Decision

The Post and Telecom Administration endorses the Mila ehf. cost analysis for lease of facilities with the amendments prescribed in this Decision.

The monthly lease prices and terms of discount shall be as shown in Appendix I to this Decision and they shall apply for hosting in Mila ehf. buildings and masts until a new cost analysis has been made.

The new Mila ehf. tariff shall come into force at the end of the month after the publication of this Decision. The tariff shall be part of the Mila ehf. reference offer for hosting when the PTA has endorsed the reference offer in question.

Mila shall update its cost analysis for hosting on an annual basis in accordance with obligations in force at any given time. When reviewing cost analysis for the Mila tariff for hosting the main rules prescribed in Section 2.8.2.

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 pursuant 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 to be paid pursuant to Article 6 of Regulation no. 36/2009 on the Appellate Committee for Electronic Communications and Postal Affairs.

Reykjavík, XX XX 2014

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