



POST AND TELECOM
ADMINISTRATION
IN ICELAND

**Draft Decision on wholesale tariff for
call origination and termination on the
public telephone network provided at
a fixed location (Markets 2 and 3)**

15 June 2015

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1 Introduction

This Draft Decision is based on the Decision of the Post and Telecom Administration (PTA) no. 36/2012 on the designation of companies with significant market power and on the imposition of obligations on the wholesale market for call origination and termination on the public telephone network provided at a fixed location (Markets 2 and 3).

Pursuant to the Decision, a tariff shall be decided for call origination and termination on the public telephone network provided at a fixed location with benchmarking. The PTA has now conducted benchmarking for the purpose of deciding price for call origination and termination on the public telephone network provided at a fixed location and the conclusion of this benchmarking forms the basis of the PTA conclusion on wholesale prices for this service.

1.1 PTA Decision no. 36/2012

On 14 December 2012 the PTA made Decision no. 36/2012 on the designation of companies with significant market power and on the imposition of obligations on the wholesale market for call origination and termination on the public telephone network provided at a fixed location (Markets 2 and 3).

1.1.1 Market 2

With a view to the definition and analysis of competition on the wholesale market for call origination on the public telephone network provided at a fixed location (Market 2) and pursuant to Paragraph 2 Article 17, see Article 18 of the Electronic Communications Act, the PTA decided to designate Siminn hf. (Siminn) with significant market power on the relevant market.

The PTA imposed the following obligations on Siminn:

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

In the obligation for price control, it was specified that the maximum price for call origination would be decided by benchmarking pursuant to the authority in Paragraph 4 of Article 32 of the Electronic Communications Act.

It was also stated that when selecting analogous competition markets the PTA would use the electronic communications market in the EEA. When choosing countries for comparison and for the calculation of call origination in fixed networks when benchmarking is used, the PTA was to apply the following main criteria:

- Reference should be made to those EEA states where the origination rates of companies with market dominance on the markets in question are subject to price control by the

electronic communications regulatory body of the state in question, on the basis of cost analysis where the bottom-up¹ (BU) LRIC² methodology was applied.

- Comparison of prices should be based on the conclusion on the origination price according to calculations based on the BU-LRIC³ model which were available when the benchmarking was made in each instance.
- The price for single transit shall be used as a reference.
- The reference shall be the price per minute of a three-minute call.
- Comparison shall be made using the average exchange rate in the relevant quarter.
- The resulting price shall not be higher than the simple average in those countries that fulfil the above conditions during the period of reference.

Then it was stated that the PTA would on an annual basis during the period of validity of the Decision, repeat the benchmarking using the above specified criteria and decide maximum origination charges for Siminn which would come into force from and including 1 January each year in accordance with the conclusions of the benchmarking. It was decided that the PTA would in the first instance decide the maximum origination charges for Siminn on the basis of these criteria from and including 1 July 2013 and subsequently on an annual basis from and including 1 January 2014 *which was at the same time as the termination charges on Market 3 would be decided by benchmarking*. Normally, all countries that fulfilled the above specified criteria should be used in the benchmarking. *The PTA however made the condition that there should be a minimum of 5 comparison countries used as a basis for deciding prices with benchmarking.*

1.1.2 Market 3

With a view to the definition and analysis of competition on the wholesale market for call termination on the public telephone network provided at a fixed location (Market 3) and pursuant to Paragraph 2 Article 17, see Article 18 of the Electronic Communications Act, the PTA decided to designate Siminn hf. (Siminn), Fjarskipti ehf. (Vodafone), Nova ehf. (Nova), Símafélagið ehf. (Símafélagið) and Hringdu ehf. (Hringdu) as having significant market power on the relevant market.

The PTA imposed the following wholesale obligations on the electronic communications companies:

- An obligation for access was imposed on Síminn, Vodafone, Nova, Símafélagið and Hringdu.
- An obligation for non-discrimination was imposed on Síminn, Vodafone, Nova, Símafélagið and Hringdu.

¹ One speaks of the "bottom-up" model in the case of calculations made on the basis of an engineering model of electronic communications networks in the relevant electronic communications market. The model is based on a hypothetical network system which is efficiently designed and which uses the most efficient technical solutions on offer at any given time.

² The Long-Run Average Incremental Cost (LRIC), that is to say where costs which are either added or saved by using the specific service or operation are added or deducted on the grounds that all costs are variable.

³ This could be prices resulting from a bottom-up LRIC, LRIC+, LRAIC or LRAIC+ model.

- An obligation for transparency was imposed on Siminn.
- An obligation for separation of accountancy was imposed on Siminn and Vodafone.
- An obligation for price control was imposed on Síminn, Vodafone, Nova, Símafélagið and Hringdu.

In the obligation for price control it was specified that the maximum price for call termination would be decided by benchmarking pursuant to the authority in Paragraph 4 of Article 32 of the Electronic Communications Act.

In the Decision it was also stated that when selecting analogous competition markets the PTA would use the electronic communications market in the EEA. When choosing countries for comparison and for the calculation of call termination in fixed networks when benchmarking is used, the PTA was to apply the following main criteria:

- Reference should be made to those EEA states where the termination rates of companies with market dominance on the markets in question are subject to price control by the electronic communications regulatory body of the state in question, on the basis of cost analysis where the pure LRIC methodology is applied.
- Comparison of prices should be based on conclusions on termination rates according to calculations based on the pure LRIC model which were available when the benchmarking was made in each instance.
- Comparison shall be made using the price for single transit.
- The reference shall be the price per minute of a three-minute call.
- Comparison shall be made using the average exchange rate in the relevant quarter.
- The resulting price shall not be higher than the average in those countries that fulfil the above conditions during the period of reference.

Then it was stated that the PTA would on an annual basis during the period of validity of the Decision, repeat the benchmarking using the above specified criteria and decide maximum termination charges which would come into force from and including 1 January each year in accordance with the conclusions of the benchmarking, but in the first instance from 1 July 2013 and subsequently annually from and including 1 January 2014. The PTA would publish conclusions from the benchmarking no later than 1 November each year with a Decision (for prices that were to apply from and including 1 January of the following year), subsequent to national consultation and to consultation with ESA. Normally, all countries that fulfilled the above specified criteria should be used in the benchmarking. The PTA however made the condition that there should be a minimum of 5 comparison countries used as a basis for deciding prices with benchmarking. This means that the above specified dates are with the reservation that at least 5 states fulfil the above specified criteria. Should 5 comparison countries not be available on 1 January 2013, the first benchmarking would be postponed by at least 6 months or until there were sufficient comparison countries.

With this, the practice was discontinued of deciding termination rates with reference to the Siminn cost analysed prices (which were based on historical costs) and this was replaced with benchmarking in accordance Article 12 of the EFTA Surveillance Authority Recommendation

on the Regulatory Treatment of Fixed and Mobile Termination Rates in the EFTA States from 13 April 2011⁴.

The main rule according to the Recommendation is that the regulatory authorities should prescribe termination rates that take into account the cost of call termination in fixed line networks in efficiently designed electronic communication networks, in accordance with a cost model based on the Long-Run Average Incremental Cost (LRIC) methodology. Projections are made of future developments on the basis of current costs where the assumption is the use of the most efficient technological solutions, such as next generation networks (NGN) in the core network. This is a pure bottom-up LRIC cost model, known as "pure BU-LRIC". The objective was that charges would correspond between all companies on the relevant market at the end of 2012, that is to say symmetrical charges.

The incremental service in question in the pure BU-LRIC model is call termination at wholesale level. The additional cost in question, or "avoidable costs" for wholesale service for call termination is the difference between total costs of network operators that provide full wholesale services and the total costs of the same network operators, less call termination wholesale services to third parties. In other words one only calculates the call termination costs that are avoided if the service in question is discontinued.

If a regulatory authority, because of its size and/or lack of funding, is unable to implement BU-LRIC then it can use another methodology, including benchmarking, see Item 12 in the ESA Recommendation and Paragraph 22 of the Preamble to the Recommendation. If it is shown that this method returns an outcome that harmonises with the objectives of the Recommendation then the implementation of BU-LRIC can be postponed until 1 July 2014. Under certain circumstances it will be possible to postpone even further. The results from a methodology other than LRIC should not exceed the average termination rates for states that use the pure LRIC methodology to decide prices.

In accordance with the ESA Recommendation, the PTA prescribed symmetrical termination rates in its Decision no. 36/2012 and that the maximum termination rates for Símafélagið, Nova and Hringdu would be the same as the Siminn termination rates. According to the Decision, the maximum termination rates should be ISK 0.63 per minute with an ISK 0.62 connection rate for each telephone call with Símafélagið, Nova and Hringdu. The symmetrical termination prices came into force from and including 1 March 2013 and they will be in force until new termination prices are decided by the PTA with benchmarking.

1.2 Number of countries available for benchmarking

Under normal circumstances all those countries that fulfil the conditions set by the PTA Decision no. 36/2012 shall be used. According to the Decision there must however be a minimum of 5 comparison countries as a basis for price decision with benchmarking. For this

⁴ EFTA Surveillance Authority Recommendation of 13 April 2011 on the Regulatory Treatment of Fixed and Mobile Termination Rates in the EFTA States.

reason the dates for implementation of the benchmarking were subject to the reservation that at least 5 countries fulfilled the conditions that were set.

With respect to Market 3 it was prescribed that if 5 comparison countries were not available on 1 January 2013, the first benchmarking would be postponed by at least 6 months or until there were sufficient comparison countries. The Decision also provided for benchmarking on Market 2 being implemented in parallel to benchmarking on Market 3.

In accordance with the above, the PTA has monitored the development of termination rates in countries within the EEA and has on a regular basis ascertained the number of states where the relevant electronic communications regulatory bodies have made a Decision on termination prices on the basis of calculations based on the pure LRIC model.

The PTA has implemented benchmarking on Market 7 on the basis of the above specified ESA Recommendation on regulatory treatment of fixed and mobile termination rates. The first benchmarking was made in 2012 and in the PTA Decision no. 32/2012, the PTA decided wholesale charges for call termination in individual mobile phone networks in Iceland on the basis of benchmarking.

Decision no. 32/2012 was appealed to the Appellate Committee for Electronic Communications and Postal Affairs on 29 November 2012. In its Ruling no. 6/2012 the Appellate Committee made objections to the coming into force of the new call termination prices.

It was stated in the conclusions of the Appellate Committee that only seven of those thirty EEA states that had been examined in the benchmarking in question had decided termination rates on the basis of the methodology in question when the PTA benchmarking took place. The Appellate Committee considered it not clear that the coming into force of the new call termination tariff had been necessary on 1 July 2013 in this country in the light of on the one hand, the number of comparison countries that had decided a later date for coming into force than the PTA or that had not made a Decision on the adoption of the cost analysis method in question, and on the other hand in the light of the fact that this was a onerous Decision. The objective of harmonising termination rates with the comparison countries could have been achieved with a longer postponement of the coming into force of the new termination rates.

For this reason the Appellate Committee considered it proper to rescind the part of the appealed Decision that related to its coming into force on 1 July 2013. The Appellate Committee assumed that a Decision on the date of commencement of the call termination tariff would be taken subsequent to the ruling. The ruling of the Appellate Committee is further discussed in Section 1.3 in the PTA Decision no. 25/2013.

In the light of the ruling by the Appellate Committee, the PTA considered it appropriate to postpone benchmarking on Market 3 until a majority of EEA states had decided termination prices in fixed line telephone networks in accordance with the Recommendation. It has been known for some time that there would be a significant price reduction in termination rates in fixed line networks in the same manner as in mobile networks which would mean that the planned Decision could be considered onerous for some electronic communications companies.

The development has been such that electronic communications regulatory bodies have been later in implementing the above specified EEA Recommendation with respect to termination rates in fixed line telephone networks than in mobile phone networks. For this reason there has been a delay in the circumstances being created that would allow a Decision on termination rates in fixed line telephone networks on the basis benchmarking.

At the beginning of the current year, a total of 17 states had decided termination rates in fixed line telephone networks on the basis of the pure BU-model and 2 states in addition had applied benchmarking with such states as the PTA does in this instance. EEA states now number 31, including Iceland. The PTA considers that all criteria are now fulfilled to decide prices for call origination and termination on the public telephone network provided at a fixed location.

1.3 National consultation

The Draft Decision of the cost analysis here under discussion was submitted to stakeholders for consultation on the Administration's website on 31 March 2015 and the consultation was completed last 5 May. Comments were received from 365 miðlar ehf. (365) and Siminn hf.

An overview of the comments received, along with the PTA position can be found in Appendix II.

2 Criteria for benchmarking

According to the above specified ESA Recommendation, electronic communications regulatory bodies were granted a general period of notice for adaptation until 31 December 2012 to prepare and introduce the pure LRIC cost model.

Less well-resourced regulators were granted longer notice, that is to say until 1 July 2014, and even longer if it would breach the principle of proportionality to force such authorities to adopt the pure BU-LRIC cost model, unless BEREC assisted them professionally and/or financially to make such a model. The PTA is considered to be one of the "less well resourced" regulators. Experience in the EEA had shown that the cost in making a BU-LRIC model was in the order of ISK tens of millions for each model and for each update. Were the PTA to intend to use this methodology for deciding termination rates, it would need to develop a model for a public telephone network provided at a fixed location in Iceland with attendant costs for the PTA and for parties to the market.

According to Paragraph 4 of Article 32 of the Electronic Communications Act, the PTA can, when calculating costs, use as a reference the operation of analogous service that is considered efficiently run. It can also take into account tariffs in analogous competition markets and it may use cost analysis methodologies that are not related to methodologies employed by an electronic communications company. In accordance with the PTA Decision no. 36/2012 and pursuant to Item 12 of the ESA Recommendation and to the authority in Paragraph 4 of Article 32 of the Electronic Communications Act, the PTA has now applied benchmarking and plans on the basis of this benchmarking to decide prices on the wholesale market for origination and termination in fixed line public telephone networks.

When selecting countries for comparison, the PTA uses electronic communications markets in the EEA where there are now 31 states including Iceland.

The PTA applies the following main criteria as a basis for calculations of call origination rates when benchmarking is applied:

- Reference is made to those EEA states where the origination rates of companies with market dominance on the markets in question are subject to price control by the electronic communications regulatory body of the state in question.
- Comparison of prices are based on the conclusion on call origination prices according to calculations based on bottom-up LRIC, LRIC+, LRAIC or LRAIC+ models available on 1 January 2015.
- The price for single transit calls is used where appropriate.
- The price per minute of a three-minute call is used.
- The average exchange rate of the last quarter of 2014⁵ is used.
- The reference shall be that a formal decision has been made by the relevant regulatory authority.
- The resulting price shall not be higher than the simple average in those countries that fulfil the above conditions during the period of reference.

The conclusion is the minute price for call origination without connection charge or break down into day, night or weekend rates.

The PTA applies the following main criteria as a basis for calculations of call termination rates when benchmarking is applied:

- Reference is made to those EEA states where the termination rates of companies with market dominance on the markets in question are subject to price control by the electronic communications regulatory body of the state in question, on the basis of cost analysis where the pure LRIC methodology is applied.
- Comparison of prices are based on the conclusion on call origination prices according to calculations based on pure BU-LRIC model available on 1 January 2015.
- The price for single transit calls are used where appropriate.
- The price per minute of a three-minute call is used.
- The average exchange rate of the last quarter of 2014 is used.
- The reference shall be that a formal decision has been made by the relevant regulatory authority.
- The resulting price shall not be higher than the average in those countries that fulfil the above conditions during the period of reference.

⁵ Central Bank of Iceland mid-rates, see Appendix I.

The conclusion is the minute price for call termination without connection charge or breakdown into day, night or weekend rates.

3 Price calculations for call origination

As stated here above the main criterion used when selecting states for benchmarking is that the prices for call origination have been decided by a bottom-up LRIC, LRIC+, LRAIC or LRAIC+ model. A total of 9 countries fulfil this criterion, that is to say Denmark, Italy⁶, Croatia, Malta, Norway, Slovakia, Sweden, Czech Republic and Germany.

The following table shows prices (converted to ISK) for call origination in fixed public telephone networks in the states in question⁷:

<i>Country</i>	<i>Cost model</i>	<i>Origination ISK/min.</i>
Denmark	BU - LRAIC	0.41
Italy	BU - LRAIC	0.32
Croatía	BU - LRAIC+	0.22
Malta	BU - LRAIC+	0.41
Norway	BU - LRAIC+	0.59
Slovakía	BU - LRIC+	0.53
Sweden	BU - LRIC	0.27
Czech Rep.	BU - LRIC+	1.73
Germany	BU - LRAIC+	0.54
Average		0.56

The reference is the prices for call origination that came into force on 1 January 2015 or before that date. According to the above, the arithmetic mean of origination prices in these states is ISK 0.56 per minute which is the equivalent of €cent 0.36 per minute.

In most EEA states there is no longer a special connection charge for call origination and for this reason it is only the minute charge that is decided for call origination.⁸ It is also the case that in the majority of the states there are no longer varying charges for day, night and weekend rates.⁹

⁶ In Italy the TSLRIC (Total Service Long Run Incremental Cost) model is used which is analogous to the LRAIC model and for this reason it is included in the benchmarking.

⁷ Source: CIRABC, Cullen International, ESA and the relevant electronic communications regulatory bodies.

⁸ In the countries covered by the benchmarking there was only a charge per minute without a separate connection charge.

⁹ Where the average price per minute with respect to traffic is established then it is used in the comparison but otherwise the arithmetic mean of those rates that are available is used.

4 Price calculations for call termination

A total of 17 states had made decisions on price on the basis of a BU-LRIC model at the last turn of the year. The states were Austria, United Kingdom, Bulgaria, Denmark, France, Greece, Ireland, Italy, Croatia, Malta, Romania, Slovakia, Slovenia, Spain, Sweden, Czech Republic and Hungary. In France and the United Kingdom, termination charges are not calculated for single transit and for this reason those states are not included in the benchmarking.

The following table shows prices (converted to ISK) for call termination in public telephone networks provided at a fixed location in the states in question¹⁰:

<i>Country</i>	<i>Cost model</i>	<i>Termination ISK/min</i>
Austria	BU Pure LRIC	0.19
Bulgaria	BU Pure LRIC	0.39
Denmark	BU Pure LRIC	0.08
Greece	BU Pure LRIC	0.11
Ireland	BU Pure LRIC	0.15
Italy	BU Pure LRIC	0.12
Croatia	BU Pure LRIC	0.09
Malta	BU Pure LRIC	0.07
Romania	BU Pure LRIC	0.22
Slovakia	BU Pure LRIC	0.19
Slovenia	BU Pure LRIC	0.13
Spain	BU Pure LRIC	0.13
Sweden	BU Pure LRIC	0.11
Czech Rep.	BU Pure LRIC	0.17
Hungary	BU Pure LRIC	0.20
Average		0.16

The reference is prices for call termination that came into force on 1 January 2015 or before that date. According to the above the arithmetic mean of termination prices in these states is ISK 0.16 per minute which is the equivalent of €cent 0.10 per minute.

In most EEA states there is no longer a special connection charge for call termination and for this reason it is only the minute charge that is decided for call termination.¹¹ It is also the case that in most states there are no longer varying charges for day, night and weekend rates.¹²

¹⁰ Source: Source: BEREC, Cullen International, ESA and the relevant electronic communications regulatory bodies.

¹¹ In those countries covered by the benchmarking, there was available information on average minute prices where the connection charge was calculated and those prices are used in the benchmarking.

¹² Where the average price per minute with respect to traffic is established then it is used in the comparison but otherwise the arithmetic mean of those rates that are available is used.

5 The PTA conclusion

In accordance with the PTA Decision no. 36/2016 the Administration plans to decide prices for origination and termination on the basis of the conclusions of benchmarking implemented by the Administration as described here above.

The benchmarking provides an average price per minute for those states covered by the benchmarking. The PTA plans to use the conclusion of the benchmarking to decide the minute price of telephone calls on Markets 2 and 3 without a connection charge and at the same time the existing connection charge will be withdrawn.

5.1 Market 2

The Siminn maximum prices for call origination are now ISK 0.63 per minute with an ISK 0.62 connection charge for each call, pursuant to the PTA Decision no. 36/2012. These charges were originally decided in accordance with the Siminn cost analysis dated 19 April 2011 which was endorsed with the PTA Decision no. 15/2011.

In accordance with the conclusion of the above specified benchmarking it is the conclusion of the PTA that the wholesale rates for call origination in the Siminn fixed line telephone network shall be **ISK 0.56/minute** for the period 01 January 2016 to 31 December 2016. These are wholesale rates per minute ex VAT. The existing connection charge will be withdrawn at the same time.

According to the PTA Decision no. 36/2012, the new prices shall apply as maximum prices for Siminn for call origination in the company's fixed line telephone network. The current maximum prices will continue to be in force unchanged until the end of 2015.

If one examines the average minute price for three-minute telephone calls then the current price for call origination is ISK 0.84 per minute which means a 33% reduction in price for three-minute telephone calls.

5.2 Market 3

The maximum prices charged by Siminn, Vodafone, Nova, Símafélagið and Hringdu for call termination are now ISK 0.63 per minute and ISK 0.62 connection charge for each telephone call pursuant to the PTA Decision no. 36/2012. These charges were originally decided in accordance with the Siminn cost analysis dated 19 April 2011 which was endorsed with the PTA Decision no. 15/2011.

In accordance with the conclusion of the above specified benchmarking it is the conclusion of the PTA that the wholesale rates for call termination in the Siminn fixed line public telephone network shall be **ISK 0.16/minute** for the period 01 January 2016 to 31 December 2016. These are wholesale rates per minute ex VAT. The existing connection charge will be withdrawn at the same time.

According to the PTA Decision no. 36/2012, the new prices shall apply as maximum prices charged by Siminn, Vodafone, Nova, Símafélagið and Hringdu for call termination in fixed line public telephone networks in Iceland. The current maximum prices will continue to be in force unchanged until the end of 2015.

If one examines the average minute price for three-minute telephone calls then the current price for call termination is ISK 0.84 per minute which means an 81% reduction in price for three-minute telephone calls.

5.3 Coming into force

In the light of this very significant reduction, the PTA proposes that the coming into force of the new call origination and termination prices be postponed until 1 January 2016. The PTA considers that in this way the electronic communications companies in this country will have generous notice to adapt to changed prices. The companies have had the opportunity to gather information about the developments in termination rates that have taken place in EEA states and the benchmarking used by the PTA.

The Decision

In accordance with the benchmarking performed by the Post and Telecom Administration, wholesale prices for call origination in the Siminn fixed line telephone network shall be ISK 0.56 per minute for the period 1 January 2016 until 31 December 2016. As from 1 January 2016 the existing connection charge for call origination will be withdrawn. The current call origination price of ISK 0.63 per minute and ISK 0.62 connection charge for each call will remain in force unchanged to and including 31 December 2015.

The wholesale price for call termination in fixed line public telephone networks in Iceland shall be ISK 0.16 per minute for the period 1 January 2016 until 31 December 2016. As from 1 January 2016 the existing connection charge for call termination will be withdrawn. The current call termination price of ISK 0.63 per minute and ISK 0.62 connection charge for each call will remain in force unchanged to and including 31 December 2015.

These are maximum wholesale rates per minute ex VAT.

This Decision comes into force from the day that it is published and will be in force until a Decision is made to the contrary by the Post and Telecom Administration.

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

Hrafnkell V. Gíslason

Óskar Þórðarson

- Appendix I: Rate of exchange.
Appendix II: Conclusions of the PTA national consultation on the draft decision.
Appendix III: Opinion of the EFTA Surveillance Authority.