

Brussels, 7 February 2024
Case No: 91546
Document No: 1431877

Fjarskiptastofa
Sudurlandsbraut 4
108 Reykjavik
Iceland

For the attention of:
Mr. Hrafnkell V. Gíslason
Managing Director

Dear Mr. Gíslason,

Subject: Cost analysis of Mila's wholesale prices for optic waves - Remedies
Article 7(3) of Directive 2002/21/EC (Framework Directive)¹: Comments

I. PROCEDURE

On 9 January 2024, the EFTA Surveillance Authority ("ESA") received a notification of a draft national measure in the field of electronic communications pursuant to Article 7 of the Framework Directive from the Icelandic national regulatory authority *Fjarskiptastofa* ("ECOI")², concerning the remedies in the wholesale market for trunk segments of leased lines, corresponding to (former) market 14/2004³, in Iceland. The notification also included an update on the weighted average cost of capital ("WACC") computation for the year 2022 (Appendix I to the draft notification).

¹ Directive 2002/21/EC of the European Parliament and of the Council of 7 March 2002 on a common regulatory framework for electronic communications networks and services, OJ L 108, 24.4.2002, p. 33 (as amended by Regulation (EC) No. 717/2007, OJ L 171, 29.6.2007, p. 32 and Regulation (EC) No. 544/2009, OJ L 167, 29.6.2009, p. 12) as referred to at point 5 cl of Annex XI to the EEA Agreement and as adapted to the Agreement by Protocol 1 ("the Framework Directive"). On 24 September 2021, the EEA Joint Committee adopted Decision ("JCD") No. 275/2021 incorporating Directive (EU) 2018/1972 of the European Parliament and of the Council of 11 December 2018 establishing the European Electronic Communications Code (Recast), as corrected by OJ L 334, 27.12.2019, p. 164 and OJ L 419, 11.12.2020, p. 36 ("the Code"), into the EEA Agreement. The Code will repeal, *inter alia*, the Framework Directive. However, until JCD No. 275/2021 enters into force, the Framework Directive remains applicable.

² On 1 July 2021, the name of the national regulatory authority in Iceland was changed from Póst-og fjarskiptastofnun (the Post and Telecoms Administration or PTA) to Fjarskiptastofa (the Electronic Communications Office of Iceland or "ECOI"). For ease of reference, the new name ECOI will be used throughout this letter even when referring to activities pre-dating 1 July 2021.

³ Corresponding to market 14 of the EFTA Surveillance Authority Recommendation of 14 July 2004 on relevant product and service markets within the electronic communications sector susceptible to *ex ante* regulation in accordance with Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communication networks and services, as incorporated into the Agreement on the Economic European Area (No. 194/04/COL) ("the 2004 Recommendation").

The notification became effective on the same day.

National consultation was carried out, pursuant to Article 6 of the Framework Directive, during the period 24 November 2023 to 27 December 2023.

Prior to the formal notification, on 4 January 2024, ESA sent clarifying questions to ECOI in relation to the WACC computation (Doc No. 1432174). ECOI responded in two tranches, on 4 January 2024 (Doc No. 1432170) and on 8 January 2024 (Doc No. 1432172).

The period for consultation with ESA and the national regulatory authorities (“NRAs”) in the EEA States, pursuant to Article 7 of the Framework Directive, expires on 9 February 2024.

Pursuant to Article 7(3) of the Framework Directive, ESA and the EEA NRAs may make comments on notified draft measures to the NRA concerned.

II. DESCRIPTION OF THE DRAFT MEASURE

II.1. Background

On 12 August 2015, ECOI⁴ designated Mila as SMP operator in the wholesale market for trunk segments of leased lines in its decision no. 21/2015. The case was notified to ESA on 1 July 2015 and assessed under two cases, Case No. 77596, regarding the market analysis, and Case No. 77597, regarding the cost analyses for the remedies⁵. Since then, there have been a number of decisions for Market 14 relating to the remedies⁶.

At the time of the latest market analysis, ECOI defined the relevant geographic market as national, and the relevant product market as encompassing the following protocols and transmission media.

Protocols:

- Asynchronous transfer mode (ATM);
- Pre-specified quality transmission with Internet protocol (for example IP-MPLS⁷);
- Multiprotocol Label Switching – Transport Profile (MPLS-TP);
- Ethernet and Ethernet VLAN⁸;
- Synchronous Digital Hierarchy / Plesiochronous Digital Hierarchy (SDH/PDH); and
- Wavelength division multiplexing (WDM, CWDM and DWDM).

Transmission media:

- Dark fibre (without endpoint devices);
- Copper (or other metal threads); and
- Wireless connection.

In its decision, ECOI imposed the following obligations on Mila:

1. access;
2. non-discrimination;
3. transparency;
4. accounting separation;
5. price control; and

⁴ PTA at the time of the decision.

⁵ See ESA’s comments letter of 3 August 2015 in Case No. 77596 (Document No [763837](#)), and ESA’s comments letter of 3 August 2015 in Case No. 77597 (Document No [764757](#)).

⁶ See, for example, Case No. 82013, Case No. 84271, Case No. 86639, Case No. 87557 and Case No. 90407.

⁷ Internet Protocol – Multiprotocol Label Switching.

⁸ Virtual Local Area Networks.

6. cost accounting.

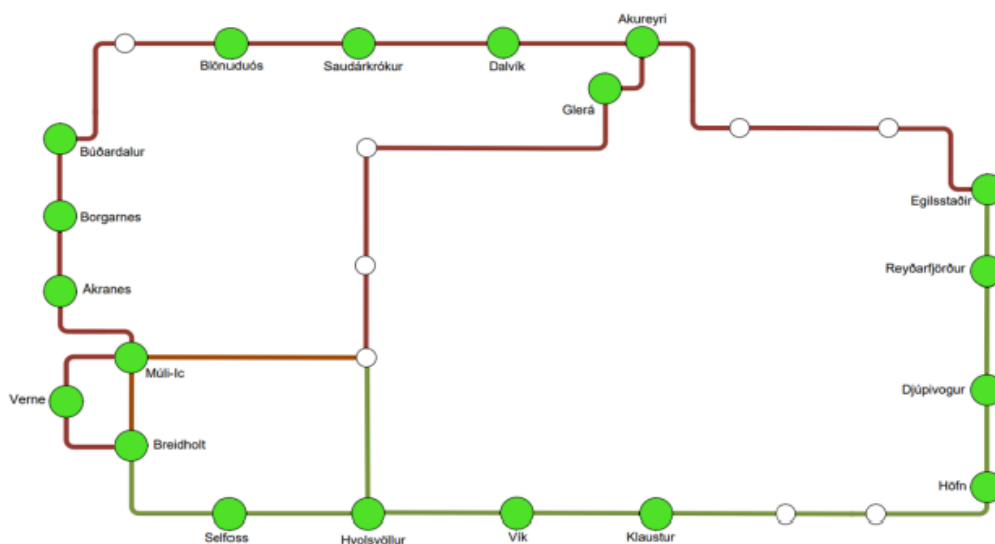
Specifically for the price control obligation, ECOI required Mila to implement cost-oriented prices. The cost analysis underlying the pricing structure should be based on historical costs accounting (“HCA”) allocated to the relevant service on a fully-allocated cost basis (“FAC”). Mila could review the existing tariffs on an annual basis, but new wholesale tariffs would be subject to ECOI’s authorisation following ad-hoc national consultation and consultation with ESA.

In its comments letter to the market analysis (Case No. 77596), ESA noted that the previous market analysis of former market 14 dated back to 2007. ESA urged ECOI to undertake a timely analysis and notification on the next market review regarding former market 14⁹. The same comment was also repeated in ESA’s comments letter in Case No. 87557 relating to an update of the remedies¹⁰.

II.2 Current notification

The current notification relates to a new product Mila is planning to offer, that is the lease of optical waves. Mila is building a system of Dense Wavelength Division Multiplexing (“DWDM”), a fibre-optic transmission technique capable of transmitting multiple light wavelengths through an optical fibre, thereby significantly increasing its transmission capacity¹¹. The system will be developed in stages and currently counts 30 locations where equipment was installed. Mila’s DWDM system went into operation in May 2023.

Figure 1: Diagram of Mila’s DWDM system. Green circles mark the locations where the service will be available



Source: ECOI’s draft decision, Figure 3.1

⁹ In its comments letter to the cost analyses of the remedies (Case No. 77597), ESA made a comment in relation to an early implementation of the remedies for Mila’s wholesale Ethernet services, authorised by ECOI one year earlier, in July 2014. ESA accepted that the early implementation fulfilled the conditions of Article 7(6) of the Framework Directive for derogation from the standard consultation procedure but took issue with the fact that ECOI did not communicate to ESA the early implementation of the obligations. In addition, ESA commented on the fact that the notified remedies were based on an old market analysis (from 2007) and invited ECOI to ensure in the future that remedies are based on the most recent market analysis.

¹⁰ See ESA’s comments letter in Case No. 87557 (Document No. [1237520](#)).

¹¹ For a more detailed description of DWDM, please see [here](#).

This product falls within the wholesale market for trunk segments of leased lines because DWDM is part of that market.

Mila submitted a cost analysis for optical waves, of which ECOI assessed the following factors.

Weighted average cost of capital (“WACC”). In Appendix I to the draft decision, ECOI includes an update to its WACC computation for the year 2022. ECOI broadly follows the methodology described in the European Commission’s Notice on the calculation of the cost of capital¹², and uses the parameters provided by BEREC¹³. The main specificity of ECOI’s computation is in the computation of the *real* risk-free rate (“RFR”). Iceland issues indexed Government bonds which by their very nature are not affected by inflation. ECOI uses the yields from these indexed bonds to compute the *real* RFR (1.08%). At the same time, it uses the yields of non-indexed Government bonds to compute the *nominal* RFR (4.17%). The difference between the two provides an estimate for the inflation in Iceland.

In its cost analysis, Mila used the *nominal* WACC computed by ECOI (7.93%).

Operating costs (“OPEX”). Mila’s OPEX is the sum of the cost of leasing the fibre-optic between locations, which makes up for the bulk of OPEX, and the cost for new equipment. The latter includes costs relating to labour, hosting, electricity, monitoring, service contracts with the equipment manufacturer and other costs.

ECOI accepted Mila’s estimation of OPEX.

Capital expenditure (“CAPEX”). Mila’s CAPEX corresponds to the equipment costs and the installation costs. As regards equipment costs, Mila presented the quote from the manufacturer to support its cost analysis. As regards installation costs, these are based on actual costs and the main cost component are wages. Based on its experience, Mila assumes an expected service life of the DWDM equipment of 10 years, longer than the service life generally associated to equipment for other transmission technologies.

ECOI accepted Mila’s estimation of CAPEX.

Setup charges. Mila proposes to use the same service charge it uses in trunk networks, that is ISK 96,386. This is because leasing optic waves requires similar installation work and set-up processes. Mila’s preliminary estimation of the setup charges results in a higher amount, but Mila proposes to use the same service charge for consistency.

ECOI accepted Mila’s proposal on setup charges. ECOI will review the setup charges once actual costs will be incurred by Mila.

Line equivalent. Mila’s prices and costs for optic waves increase with the distance of the connection (in km) and with the data transfer speed (in Gbps). A convenient way to scale Mila’s prices consistently with these two variables is by designing a base unit (i.e. a line equivalent) with 1km distance and 1 Gbps of speed, with its associated costs. The prices of Mila’s other offers with varying amounts of distance and speed will then be calculated as multiples of the line equivalent.

The number of line equivalents needs to vary with the two variables (i.e. the distance of the connection and the data transfer speed) according to some function. Mila suggests using

¹² Communication from the Commission – Commission Notice on the calculation of the cost of capital for legacy infrastructure in the context of the Commission’s review of national notifications in the EU electronic communications sector, OJ C 375, 6.11.2019, p. 1–11, available [here](#).

¹³ See BEREC’s report [here](#).

the power function for both variables, with an exponent of 0.35 for speed and 0.4 for distance. This means that the number of line equivalents will grow as speed increases and as distance increases, but at an increasingly lower rate. For example, for a distance of 1 km, the number of line equivalents is 1 for 1 Gbps, and 5.01 for 100 Gbps. The relation between distance and speed is multiplicative¹⁴.

ECOI reviewed Mila's methodology and had no comments. ECOI notes that the exponent of 0.35 for speed is appropriate as this parameter ranged between 0.35 and 0.45 in previous cost analyses. ECOI further notes that using a higher exponent for distance compared to speed is also appropriate, as the costs are more dependent on distance than on speed.

Deductions due to income. Income that Mila receives from ports and from a yearly service contract is deducted from the yearly costs used as a basis to compute the price per line equivalent. The port fee is added back to the monthly prices based on the data transmission speed according to the following schedule:

Figure 2: Monthly fees per Port Gigabit Ethernet (GbE, equivalent to Gbps)

Port GbE	Monthly fee
1	ISK 3,600
10	ISK 9,000
25	ISK 12,960
100	ISK 22,500

Source: ECOI draft decision, page 25.

ECOI accepted these deductions in Mila's computations.

Final prices. Based on the above, Mila computes a monthly fee per line equivalent (i.e. 1 Gbps and 1km) of **ISK 10,291**. This amount is then scaled by the number of line equivalents, resulting in the following fee schedule.

Figure 3: Monthly price schedule per Mila's optical waves lease by distance and data transmission speed, excluding port fees

Distance in km	1Gb/s	10Gb/s	25Gb/s	100Gb/s
25	ISK 37,294	ISK 83,490	ISK 115,058	ISK 186,912
50	ISK 49,209	ISK 110,166	ISK 151,819	ISK 246,631
100	ISK 64,932	ISK 145,365	ISK 200,327	ISK 325,432
200	ISK 85,679	ISK 191,810	ISK 264,333	ISK 429,410
300	ISK 100,765	ISK 225,584	ISK 310,876	ISK 505,020
400	ISK 113,054	ISK 253,095	ISK 348,789	ISK 566,610

Source: ECOI draft decision, page 25.

The price of two ports per data transmission is then added to each of the monthly fees, resulting in the following monthly fee schedule for Mila's optical waves offering.

¹⁴ The number of line equivalents is further multiplied by the number of connections in the cases where there are more than 1.

Figure 4: Monthly price schedule per Mila's optical waves lease by distance and data transmission speed, including port fees for two ports

Distance in km	1Gb/s	10Gb/s	25Gb/s	100Gb/s
25	ISK 44,494	ISK 101,490	ISK 140,977	ISK 231,912
50	ISK 56,409	ISK 128,166	ISK 177,739	ISK 291,631
100	ISK 72,132	ISK 163,365	ISK 226,247	ISK 370,432
200	ISK 92,879	ISK 209,810	ISK 290,253	ISK 474,410
300	ISK 107,965	ISK 243,584	ISK 336,796	ISK 550,020
400	ISK 120,254	ISK 271,095	ISK 374,709	ISK 611,610

Source: ECOI draft decision, page 25.

Finally, the setup fee is ISK 96,386.

ECOI accepts these computations and results. Furthermore, ECOI asks Mila to submit an updated cost analysis based on actual demand and cost data no later than 1 March 2025.

III. COMMENTS

ESA has examined the notified draft measure and has the following comment:

Market review timing and timely enforcement and effectiveness of remedies

ESA recalls the comment it made in its comments letter addressed to ECOI on 3 August 2015 in Case No. 77596, relating to the market analysis of former market 14 (the market analysis at the basis of the current remedies decision). At the time, ESA noted that eight years had passed without an update to the market analysis for the wholesale market for trunk segments of leased lines. ESA stressed the need for ECOI to conduct regular market analyses to reflect the developments of the market conditions and the competitive environment, and to ensure the proper effectiveness of the remedies to avoid harming competition and reducing legal certainty for market participants. ESA repeated the comment in 2021, in Case No. 87557.

Today, over eight years have again passed since the last market analysis of former market 14 in 2015. ESA wishes to emphasise strongly that a long time gap between market analyses risks to seriously undermine the objectives of the regulatory framework, notably the development of an internal market and more specifically the need to ensure effective competition on the relevant markets and to provide market players with certainty as to regulatory conditions. Further, regular reviews are necessary to ensure that obligations are (or continue to be) based on the nature of the problem identified, proportionate and justified, in line with Article 8(4) of the Access Directive¹⁵.

While appreciating that over the last year ECOI has been focussing on the market analysis for markets 3a and 3b, ESA urges again ECOI to conduct market analyses in a timely fashion to ensure that the market definition, the SMP designation and any existing obligations are up-to-date and reflect the actual need of the market given its competitive environment. Furthermore, in the case of markets such as market 14/2004, for which the Commission and ESA no longer recommend regulation at EEA level, ECOI needs to carry

¹⁵ Directive 2002/19/EC of the European Parliament and of the Council of 7 March 2002 on access to, and interconnection of, electronic communications networks and associated facilities ("the Access Directive"), OJ L 108, 24.4.2002, p. 7, as referred to at point 5 cj of Annex XI to the EEA Agreement and as adapted to the Agreement by Protocol 1.

out a new three-criteria test to assess whether any regulation continues to be warranted in Iceland.

Finally, ESA notes that the revised regulatory framework introduced by the Code¹⁶, while not yet in force in the EEA, includes more stringent provisions on the timing of market reviews and on the review of obligations¹⁷.

IV. FINAL REMARKS

On a procedural note, ESA recalls that any future amendments to, or more detailed implementation of, the draft remedies consulted on in the current notification will require re-notification in accordance with Article 7(3) of the Framework Directive.

Pursuant to Article 7(5) of the Framework Directive, ECOI shall take the utmost account of comments of other regulatory authorities and ESA. It may adopt the resulting draft measure and, when it does so, shall communicate it to ESA.

ESA's position on the current notification is without prejudice to any position ESA may take in respect of other notified draft measures.

Pursuant to Point 15 of the Procedural Recommendation¹⁸, ESA will publish this document on its eCOM Online Notification Registry. ESA does not consider the information contained herein to be confidential. You are invited to inform ESA within three working days¹⁹ following receipt of this letter if you consider, in accordance with EEA and national rules on confidentiality, that this letter contains confidential information which you wish to have deleted prior to publication. You should give reasons for any such request.

Yours sincerely,

Filip Ragolle
Deputy Director for Competition and Regulation
Competition and State Aid Directorate

This document has been electronically authenticated by Filip Ragolle.

¹⁶ See footnote 1 above.

¹⁷ In particular, once JCD No. 275/2021 enters into force, the EEA EFTA States will need to comply with Article 67(5) of the Code, which stipulates that NRAs should, as a rule, review relevant markets at least every five years. Moreover, Article 68 contains detailed provisions on the imposition, amendment or withdrawal of obligations.

¹⁸ EFTA Surveillance Authority Recommendation of 2 December 2009 on notifications, time limits and consultations provided for in Article 7 of the Act referred to at point 5cl of Annex XI to the Agreement on the European Economic Area (Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communications networks and services), as adapted by Protocol 1 thereto, OJ C 302, 13.10.2011, p. 12 ("the Procedural Recommendation"), and available on the ESA website [here](#).

¹⁹ The request should be submitted through the eCOM Registry, marked for the attention of the eCOM Task Force.