EFTA SURVEILLANCE AUTHORITY

Brussels, 13 November 2017
Case No: 81251
Document No: 879426

Norwegian Communications Authority
Postboks 93
4791 Lillesand
Norway

For the attention of:
Ms Elisabeth Aarsæther
Director General

Dear Ms Aarsæther,

Subject: Markets for wholesale voice call termination on individual mobile networks

Comments pursuant to Article 7(3) of Directive 2002/21/EC ("Framework Directive")[1]

I. PROCEDURE

On 11 October 2017, the EFTA Surveillance Authority ("the Authority") received a notification of a draft national measure in the field of electronic communications pursuant to Article 7 of the Framework Directive from the Norwegian national regulatory authority, Nasjonal kommunikasjonsmyndighet ("Nkom"), concerning the wholesale markets for voice call termination on individual mobile networks in Norway[2].

The notification became effective on the same day.

National consultation was carried out, pursuant to Article 6 of the Framework Directive, during the period 22 August 2017 to 19 September 2017.

On 25 October 2017, a request for information was sent to Nkom (Document No 879144), and a reply was received on 30 October 2017 (Document No 880399).

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[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 5cl of Annex XI to the EEA Agreement and as adapted to the Agreement by Protocol 1 (the "Framework Directive").

[2] Corresponding to market 2 of the EFTA Surveillance Authority Recommendation of 11 May 2016 (Decision No 093/16/COL) on relevant product and service markets within the electronic communications sector susceptible to ex ante regulation in accordance with the Framework Directive, OJ L 84, 30.3.2017, p.7 ("the 2016 Recommendation").

Rue Belliard 35, B-1040 Brussels, tel: (+32)(0)2 286 18 11, fax: (+32)(0)2 286 18 00, www.eftasurv.int

The period for consultation with the Authority and the national regulatory authorities ("NRAs") in the EEA States pursuant to Article 7 of the Framework Directive expires on 13 November 2017.

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

II. DESCRIPTION OF THE DRAFT MEASURES

II.1. Background

Nkom´s fourth full review of the markets for wholesale voice call termination on individual mobile networks in Norway was notified to and assessed by the Authority under Case No. 76520.[3]

Subsequently, Nkom adopted the notified measures designating the mobile operators Telenor, TeliaSonera, Tele2, Network Norway, Com4, Lyca, TDC and Ventelo as having significant market power ("SMP") in the markets for voice call termination on their respective mobile networks. Nkom imposed the following obligations on all SMP operators: access/interconnection, non-discrimination, transparency[4] and price control based on Nkom´s updated LRIC model.

The updated LRIC model (version 8) modelled the costs for a hypothetical operator whose business is representative of the operators in the Norwegian market. On the basis of the LRIC model, the following mobile termination rates ("MTRs") were imposed:

Maximum price from 1 July 2015	Maximum price from 1 January 2016	Maximum price from 1 January 2017
8.3 øre	7.5 øre	6.5 øre

Maximum price stated in øre (NOK 0.01) excl. VAT.

II.2. Market definition

The relevant product market is that of voice call termination on individual mobile networks of COM4, Get, ICE, Lycamobile, Phonero, TDC, Telenor and Telia respectively.

The individual markets cover voice call termination in GSM[5], UMTS[6] and LTE[7] networks. Termination of voice calls on LTE networks has not previously been included in the product market definition. Nkom notes that this was mostly due to the fact that voice calls over LTE networks were not offered on the Norwegian market. Today, however, both Telenor and Telia offer voice calls over LTE networks and Telenor includes access to Voice over LTE ("VoLTE") and Wi-Fi calling ("VoWi-Fi")[8] in its

[3] See the Authority´s "No comments letter" dated 19 December 2014 (Document No 731915).
[4] Both Telenor and Telia were subject to an obligation to publish a reference offer, whereas all other operators were obliged to publish their termination rates.
[5] Global System for Mobile Communications (2G).
[6] Universal Mobile Telecommunications System (3G).
[7] Long Term Evolution (4G).
[8] Similarly to OTT (Over-The-Top) services such as Skype and Viber, VoWi-Fi makes use of the internet, however, VoWi-Fi is usually connected to the operator´s voice platform and, therefore, to the public telephone network. While Telenor is currently offering VoWi-Fi, Telia is in the phase of testing this technology.

MVNO and service provider agreement.[9] Nkom expects that LTE networks will be nationwide within the upcoming two-to-three year period. In order to respect the principle of technology neutrality, Nkom considers that voice calls terminated via VoLTE and via VoWi-Fi technology should be included in the product market definition.[10]

In addition, the markets include termination on voice mail services. Time-metered traffic to mobile-based machine-to-machine ("M2M") subscriptions in the 4x, 58x, 59x and 9x number series are also included. SMS termination is excluded.

The relevant geographic markets coincide with the geographic coverage of each network in Norway.

II.3. Finding of significant market power

Nkom proposes to designate eight operators as having SMP in their respective markets. These eight operators are the three Mobile Network Operators ("MNOs") ICE, Telenor and Telia and the five Mobile Virtual Network Operators ("MVNOs") COM4, Get, Lycamobile, Phonero and TDC.

The main criteria considered by Nkom when reaching its conclusion are: market shares (each operator has its own termination market with a market share of 100%), lack of potential effective competition, entry barriers, price levels and price developments, as well as the absence of countervailing buying power.

II.4. Regulatory remedies

Nkom proposes to maintain on all SMP operators obligations of access/interconnection, non-discrimination and price control. Nkom further proposes to maintain an obligation of transparency, requiring Telenor and Telia to publish a reference offer whereas COM4, Get, ICE, Lycamobile, Phonero and TDC are subject to an obligation to publish their prices for termination on mobile networks and to give advance notice to other providers of any unfavourable changes to existing interconnection services for mobile telephony[11].

As regards the price control obligation, Nkom proposes to continue the obligation on all SMP operators to set MTRs according to a BU-LRIC methodology reflecting the costs of an efficient operator in line with the Termination Rates Recommendation[12].

An updated BU-LRIC model (Version 9)[13] is included in Nkom´s notification. Whereas the previous version calculated the costs of voice call termination on the networks of Telenor, Tele2, Telia and a generic operator, Nkom has chosen to limit the update to calculating the costs of a generic efficient operator in Norway. Nkom considers that the

[9] Moreover, in its reply to the Authority´s request for information, Nkom noted that ICE has indicated its plan to launch VoLTE in 2018.
[10] The end user continues to use their normal phone number for such calls and the price is the same as for other voice traffic and does not use the end user's data allowance. In addition, Nkom notes that end users will not notice which type of network a call is terminated in.
[11] Such notice is to be given no later than two months before the changes are implemented.
[12] EFTA Surveillance Authority Recommendation of 13 April 2011 on the Regulatory Treatment of Fixed and Mobile Termination Rates in the EFTA States (OJ C 340, 8.11.2012, p. 5).
[13] Dated 29 September 2017.

use of a generic operator produces robust results[14] and, moreover, that the use of a generic operator is the most appropriate starting point to determine the costs of an efficient operator as required by the Termination Rates Recommendation.

No updates have been made with regard to the modelled technologies. Therefore, Version 9 of the BU-LRIC model is based on the assumption that an efficient mobile network comprises 2G and 3G technology.[15] Nkom notes that it has considered the guidelines foreseen in the Termination Rates Recommendation, possible developments and expected new rules. Nkom has also taken account of experience from other countries demonstrating that a LRIC model with full-scale LTE has a negligible impact on termination costs and considers that the outcome would not be any different with regard to the Norwegian mobile networks.

In response to the Authority´s request for information, Nkom explained that in late 2016 when Nkom considered how to update the LRIC model, only Telenor and Telia offered VoLTE and they had been doing so for less than one year. Consequently, an update of the model to include 4G technology would be based on limited operator information. Information provided by the operators during the data request phase (information submitted to Nkom in March 2017) indicated that in 2016, Telia and Telenor carried less than [redacted] respectively of voice on their VoLTE networks. Against this background, Nkom considered that the final results of the model would be dependent on a speculative forecast of whether VoLTE would comprise 10% or 90% of the voice traffic in the coming years.[16]

As regards the impact on termination costs in Norway, Nkom explained that although the modelling of 4G technology could potentially reduce the equipment-related costs as the network becomes more 4G dominated, this would, in absolute terms, only imply a small reduction in the total pure LRIC of voice call termination. The reason being that LTE predominantly supports high data traffic volumes and the pure LRIC of voice termination is mainly related to the 2G and 3G technical component. Furthermore, the full potential would only be realised if a significant migration from 2G and 3G was assumed before 2021 which Nkom would consider highly uncertain.

As a result of the update, Nkom proposes to set the following symmetric BU-LRIC MTRs[17]:

Maximum price from 1 March July 2018	Maximum price from 1 January 2019	Maximum price from 1 January 2020
5.4 øre	4.3 øre	3.2 øre

[14] Nkom observes that its long experience with cost modelling based on the LRIC methodology has demonstrated that there are no significant differences in costs among the Norwegian network operators or between MVNOs and MNOs for the part of the production that MVNOs do themselves.

[15] In its reply to the Authority´s request for information, Nkom emphasised that the updated BU-LRIC model does account for the existence of LTE network deployments through an allocation of specific technical costs to 4G traffic. This is done for the assets in the modelled 2G/3G network that would be used for LTE services (specifically, the radio sites), thus reflecting the greater economies of scope which can be anticipated from a combined 2G+3G+LTE network infrastructure.

[16] Subsequent to the Authority´s request for information, Nkom asked ICE, Telenor and Telia to provide the projected uptake of VoLTE over the forthcoming three-year period. Within the time limit, a reply was only received from Telenor which assumed that in 2020 more than [redacted] of national (person-to-person) voice traffic would be carried as VoLTE.

[17] The maximum prices are based on the efficient costs for each individual year and do not represent a glide path towards a future efficient price. The maximum prices take expected inflation over the entire regulatory period into account.

Maximum price stated in øre (NOK 0.01) excl. VAT.

The proposed maximum prices will apply on a per-minute basis to voice call termination. The maximum prices do not apply to calls originated in countries outside the EEA.

Nkom will aim to adopt a new decision before the end of the coming price cap period (i.e. by the end of 2020). The price cap of 3.2 øre is to be applied until the new decision enters into force.

III. COMMENTS

The Authority has examined the notified draft measure and has the following comment:

Need to base the MTR cost model on efficient technologies in the timeframe of the market review

The Authority notes that LTE technology is not modelled explicitly in Nkom´s BU-LRIC model.

The Authority takes note of Nkom´s decision to delay the full update of its cost model until the EU completes the review of the Termination Rates Recommendation and approves the European Communications Code, to ensure that the updated model complies with the new rules.

Nonetheless, the Authority notes that the Termination Rates Recommendation specifies in point 4 that the cost model should be based on efficient technologies available in the time frame considered by the model (i.e. the market review period). The present notification concerns the setting of MTRs in Norway up to the end of 2020. In its notification, Nkom observes that the network operators continuously invest in the roll-out of 4G / LTE networks. Moreover, in response to the Authority´s request for information, Nkom explained that Telenor observed a significant upward trend in VoLTE take-up on its network in 2017 and expected that trend to continue into 2020.

The Authority believes that excluding LTE technologies in the network design of the cost model could have an impact on the estimated cost of mobile voice call termination. For example, the inclusion of 4G technologies may affect the radio frequencies considered or the cost of the equipment required by the generic efficient operator, all of which are inputs into the BU-LRIC model.

Against this background, the Authority invites Nkom to reconsider the inclusion of relevant technological developments, such as 4G, in the BU-LRIC model as soon as possible.

IV. FINAL REMARKS

On a procedural note, the Authority 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.

EFTA SURVEILLANCE AUTHORITY

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

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

Pursuant to Point 15 of the Procedural Recommendation,[18] the Authority will publish this document on its eCOM Online Notification Registry. The Authority does not consider the information contained herein to be confidential. You are invited to inform the Authority within three working days[19] 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,

Gunnar Thor Pétursson
Director
Internal Market Affairs Directorate

Emily O'Reilly
Deputy Director for Competition
Competition and State Aid Directorate

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[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, and available on the Authority's website at http://www.eftasurv.int/media/internal-market/recommendation.pdf ("the Procedural Recommendation").

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