

Brussels, 17 July 2023  
Case No: 90675  
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Norwegian Communications Authority  
Postboks 93  
4791 Lillesand  
Norway

For the attention of:  
Mr Pål Wien Espen  
Director General

Dear Mr Espen,

**Subject: Wholesale local access provided at a fixed location and wholesale central access provided at a fixed location for mass-market products in Norway – Remedies – Updated price caps for copper-based services**

**Comments pursuant to Article 7(3) of Directive 2002/21/EC (Framework Directive)<sup>1</sup>**

## I. PROCEDURE

On 20 June 2023, 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 Norwegian national regulatory authority, *Nasjonal Kommunikasjonsmyndighet* (“Nkom”). It concerns an update of price caps for copper-based services in the market for wholesale local access provided at a fixed location and in the market for wholesale central access provided at a fixed location for mass-market products in Norway.<sup>2</sup>

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<sup>1</sup> 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.

<sup>2</sup> Corresponding to markets 3a and 3b of the EFTA Surveillance Authority Recommendation of 11 May 2016 on relevant product and service markets within the electronic communications sector susceptible to *ex ante* regulation in accordance with the Act referred to at point 5cl of Annex XI to the EEA Agreement (*Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communications networks and services*); adopted by Decision No 093/16/COL, OJ L 84, 30.3.2017, p. 7 (“2016 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 4 March to 7 April 2022.

On 21 June 2023, ESA requested clarifications from Nkom, which it received on the same day. On 5 July 2023, ESA received a submission from Telenor ASA (“Telenor”) concerning the present notification. On 6 July 2023, ESA met with Nkom and sent a written request inviting Nkom to comment on Telenor’s submission. On 7 July 2023, ESA had a meeting with Telenor, in which Telenor explained its comments in more detail. On the same day, Nkom replied to ESA’s request. On 13 July 2023, ESA requested additional clarifications, which Nkom provided on 14 July 2023.

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 20 July 2023.

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 20 December 2018, Nkom adopted decisions designating Telenor as a provider with significant market power (“SMP”) in the wholesale markets for local and central access provided at a fixed location (markets 3a and 3b of the 2016 Recommendation).<sup>3</sup> The remedies included, among others, an obligation for Telenor to grant access to its entire copper network. Price control for copper access was based on a long-run incremental cost (“LRIC”) model. The model yielded the following monthly price caps for local loop unbundling (“LLU”): NOK 73 in 2019; NOK 75 in 2020; and NOK 77 in 2021. Price control was also imposed for copper access products in market 3b, notably for ADSL, VDSL and SHDSL<sup>4</sup> broadband access. ESA made several comments, including one calling on Nkom to monitor the impact of the cost methodology for copper access prices (in particular, the historical cost accounting approach used for copper LLU).

In January 2019, i.e. just one month after the above decision by Nkom and with no prior discussion with either Nkom or access seekers, Telenor unilaterally announced that it intended to decommission its copper network. In a decision of 2 September 2020,<sup>5</sup> Nkom amended the access obligation on Telenor to ensure that it would maintain access to its copper-based network for a period of 5 years following the entry into force of its decision (i.e. until September 2025). Additionally, Nkom imposed an obligation on Telenor to prepare a draft plan for the migration from copper-based infrastructure without undue delay. Nkom noted that the migration plan could allow Telenor to decommission its copper network prior to the 5-year deadline, as long as relevant replacement products were provided to access seekers and the migration path was agreed with Nkom. ESA commented, among other things, on the need for Nkom to ensure appropriate access remedies following Telenor’s announcement of the decommissioning (see footnote 5). As of the date of the present letter, Telenor and access seekers have not reached an agreement on a migration plan. Therefore, Telenor’s obligation to maintain copper access remains in place.

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<sup>3</sup> Notified to and assessed by ESA under Cases No 82766 and 82767. See ESA’s comments letter of 3 December 2018, [here](#).

<sup>4</sup> ADSL: asymmetric digital subscriber line; VDSL: very high-speed digital subscriber line; SHDSL: single-pair high-speed digital subscriber line.

<sup>5</sup> Notified to and assessed by ESA under Case No 85355. See ESA’s comments letter of 23 July 2020, [here](#).

However, Nkom allowed some additional flexibility to Telenor to decommission part of its copper network following the planned migration of Telenor's customers to alternative services (i.e. fibre and fixed wireless access ("FWA")). In a decision of 21 April 2022,<sup>6</sup> Nkom amended Telenor's obligation to provide access to its entire network, to allow Telenor to decommission a total of 542 Plain Old Telephone Service ("POTS-only") sites, which had never been used for broadband services. ESA commented on the need to monitor and ensure an adequate notice period prior to decommissioning. Furthermore, in a decision of 8 June 2023,<sup>7</sup> Nkom amended Telenor's obligation to provide access to its copper network by allowing Telenor to decommission, subject to certain requirements, empty copper exchanges and exchanges with up to 5 active accesses.

## II.2 Current notification

In the notified draft measure, Nkom proposes to set new price caps for physical access to the copper-based access network and access to the sub-access line (LLU and sub-loop unbundling ("SLU")) in market 3a, as well as price caps for ASDL, VDSL and SHDSL broadband access in market 3b.<sup>8</sup> Nkom intends to apply the new price caps as of October 2023.

At the outset, Nkom recalls that the progressive decommissioning of the copper network is the result of Telenor's unilateral initiative, without prior consultation with the market and with Nkom. In the remaining period until September 2025, when Telenor will be allowed to fully switch off the copper network, Nkom deems it important to preserve price stability and predictability. That is considered crucial to enable effective retail competition throughout Norway, based on wholesale access and/or by developing alternative networks, whilst also ensuring that falling volumes on the copper network and the gradual transition to the relevant replacement products do not entail excessive costs for the access seekers. At the same time, pricing should ensure cost recovery for Telenor, in accordance with the assumptions and principles underlying the LRIC model. Moreover, Nkom considers that, in view of the phase-out of copper and the short time remaining until the full switch-off, it is reasonable to assume that copper access price levels no longer exert a significant impact on investment decisions, i.e. the so-called "build or buy" trade-off is heavily reduced or non-existent.

At the end of 2022, Telenor completed the migration of its retail customers from its copper network to alternative services and has since then no own end customers left on its copper network. There are still around 31,000 copper-based broadband accesses to Telenor's copper network from all its access seekers combined (data from 2022). Nkom points out that the decommissioning of several empty or nearly empty exchanges based on the abovementioned decisions (see footnotes 6 and 7) significantly reduces Telenor's costs to maintain the copper network.<sup>9</sup>

Nkom finds that the principles of price predictability and stability along with the principle of cost recovery, given the developments described above, in particular the faster transition

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<sup>6</sup> Notified to and assessed by ESA under Case No 88321. See ESA's comments letter of 30 March 2022, [here](#).

<sup>7</sup> Notified to and assessed by ESA under Case No 90415. See ESA's no comments letter of 5 June 2023, [here](#).

<sup>8</sup> Currently, the price caps for 2021 are still applicable, based on the clause in the decisions of 20 December 2018 that they would continue to apply beyond 31 December 2021 unless Nkom were to take a decision setting new price caps until that time. Regarding SHDSL, Nkom did not model price caps, but imposed an obligation on Telenor to apply prices that would not significantly deviate from the levels prevailing at the time of the 2018 decisions.

<sup>9</sup> Nkom estimates that, based on the decision of 8 June 2023, Telenor should be able to decommission around 1,133 empty exchanges and around 1,394 nearly empty exchanges, i.e. a very significant portion of the 3,406 exchanges remaining in Telenor's copper network.

from copper to other technologies compared to the predictions in the original LRIC model, warrant a partial update of that model. In contrast, a complete overhaul of the model would entail technical challenges and resources (notably, time, staff and costs) that do not seem justified, especially in view of the remaining duration of the copper access obligation. Nkom also considered the alternative approach consisting in setting the price cap for copper access to the price level of a modern equivalent asset (“MEA”), e.g. the lower speed segment of fibre VULA,<sup>10</sup> but discarded that approach as excessively challenging in terms of comparability between a copper network and a fibre network.

Against this background, Nkom considers that the most appropriate approach is to continue price cap regulation based on modelled costs, while updating inputs regarding demand, inflation and the weighted average cost of capital (“WACC”, in real terms). Nkom used information from Statistics Norway (“SBB”) and Norges Bank, Nkom’s own published statistics and data from Telenor.

In particular, Nkom proposes the following updates:

- a) Adjusted demand, based on historical information up to and including 2022 and forecasts for 2023-2025. The adjustment takes into account the development in Telenor’s copper accesses (retail and wholesale) and the progression in fibre deployment by Telenor and other operators (notably, Telia). Demand related to other technologies such as hybrid fibre coaxial (“HFC”) and FWA is not included in the model.
- b) The real and pre-tax WACC is set to 3%, based on Nkom’s decision of 7 December 2022 on the WACC for 2023.<sup>11</sup>
- c) Updated assumptions regarding inflation based on data from SBB and Norges Bank.

Regarding in particular LLU, Nkom is proposing to set the following price caps: (i) from 1 October 2023, NOK 94 per month; (ii) from 1 January 2024, NOK 98 per month; and (iii) from 1 January 2025, NOK 102 per month.

Following Telenor’s submission to ESA, Nkom’s comments included the additional information below in relation to the effect of the adjustments made to the LRIC model. Table 1 below breaks down the changes resulting from updating demand, inflation and the WACC compared to the values calculated based on the original 2018 model. The decrease in the costs shown in the last row of the table is due to a decrease in the real WACC from 2018 (5.7%) to 2023 (3%).

Monthly cost of copper LLU (NOK)	2023	2024	2025
v2.3F	81.2	83.2	85.1
Update demand	83.8 (+3%)	85.6	87.5
Update demand + inflation	91.4 (+9%)*	94.8	97.9
Update demand, inflation and WACC	87.9 (-4%)*	91.2	94.0

Table 1. Changes in monthly costs of copper LLU (NOK). Changes based on update of demand, inflation and WACC.

\*Percentage values are stepwise change compared to the previous line in the table, not a cumulated change.

Table 2 below presents the additional effect of taking into account the development of other relevant NGA<sup>12</sup> demand (in particular, Telia’s fibre connections). The update also

<sup>10</sup> Virtual unbundled local access.

<sup>11</sup> Notified to and assessed by ESA under Case No 89447. See ESA’s no comments letter of 10 November 2022, [here](#).

<sup>12</sup> Next generation access.

applies an adjustment for reduced demand due to fibre overbuild, reflecting the fact that, while Telenor mostly does not deploy fibre in parallel to other operators, it does have coverage in a small proportion of the premises where at least one alternative operator is present; this results in including only 85% (instead of 100%) of other NGA demand from 2023 onwards.

Monthly cost of copper LLU (NOK)	2023	2024	2025
Update demand, inflation and WACC	87.9	91.2	94.0
Revised treatment of Telia subscribers	83.1	86.8	90.0
Assume 85% of other relevant NGA included (v2.4)	93.8	97.9	101.5

Table 2. Changes in monthly costs of LLU (NOK). Changes based on update of Telia subscribers, and NGA overbuild.

In the national consultation, Nkom received comments from Telenor, GlobalConnect and Telia. The latter two operators expressed support for Nkom's approach. In contrast, Telenor submitted that the proposed partial update of the LRIC model does not ensure effective cost recovery and criticised the lack of transparency regarding the modified assumptions and the calculations made by Nkom in its revision of the model.

As mentioned in Section I above, during the present notification procedure Telenor submitted additional information to ESA, which it also presented during a meeting. In essence, Telenor claims that Nkom's approach falls short of ensuring effective cost recovery, because the price caps envisaged by Nkom are below avoidable costs (which Telenor defines as the incremental operating expenditures that Telenor could avoid if it was not required to continue operating its copper access network). In addition, Telenor complains that Nkom has not ensured sufficient transparency regarding the changes to the assumptions (e.g. volume forecasts) and the calculations underlying the partial update of the LRIC model.

In response to Telenor's comments, Nkom met with ESA and made a submission referring to the reasoning in its draft decision and explaining its position in more detail. In particular, Nkom emphasises that the LRIC model, as updated, ensures effective cost recovery in line with the relevant legal provisions, notably the Commission's Recommendation on consistent non-discrimination obligations and costing methodologies ("the Non-discrimination and Costing Recommendation").<sup>13</sup> Nkom reiterated the importance of price stability and predictability, and the fact that access seekers should not bear the consequences of Telenor's unilateral decision to decommission its copper network in the form of unreasonably high access prices, nor does Nkom see any concern relating to distorted investment incentives (as described above). Nkom also reminds that, subject to agreement with access seekers and Nkom on a migration plan to appropriate replacement products, Telenor would be able to complete the switch-off earlier than September 2025, the end date set in Nkom's 2020 decision.

<sup>13</sup> Commission Recommendation 2013/466/EU of 11 September 2013 on consistent non-discrimination obligations and costing methodologies to promote competition and enhance the broadband investment environment, OJ L 251, 21.9.2013, p. 13, available [here](#).

### III. COMMENTS

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

#### **Need to monitor the impact of the costing methodology for copper access prices**

ESA refers to its comment in cases 82766 and 82767 (see footnote **Error! Bookmark not defined.**<sup>3</sup> above) reminding Nkom of the caution needed when using a historical cost accounting approach for copper LLU, particularly in view of the need to set the appropriate incentives for the operators' "build or buy" decisions.

ESA reiterates that, based on the Non-discrimination and Costing Recommendation (see footnote 13 above), a BU-LRIC<sup>14</sup>+ model with current cost accounting is in principle better suited to price legacy assets that have been substantially depreciated and could be replicated in the competitive process.

That being said, ESA finds it reasonable to assume, as Nkom does in the draft measure under assessment, that in the current decommissioning phase the effect of copper access pricing on operators' investment decisions is reduced significantly. Besides, ESA acknowledges and supports Nkom's concern for price stability and predictability, together with the need to ensure effective cost recovery for the SMP operator.

In conclusion, ESA invites Nkom to continue to be vigilant and monitor the impact of the proposed price changes during the remaining lifetime of the copper network in Norway. Moreover, ESA invites Nkom to consider the appropriateness of the cost model applied relative to the life cycle of the technology, should price regulation be required also for newer technologies.

#### **Need to duly explain and monitor consistency with the cost recovery principle**

ESA takes note of the disagreement between Nkom (supported by access seekers) and Telenor regarding the fact that the proposed methodology, and in particular the partial update of the LRIC model, ensures effective cost recovery in line with the relevant legal provisions.

ESA recalls that the principle of cost recovery is set out in Article 13 of the Access Directive.<sup>15</sup> Article 13 states, in particular, that NRAs "*shall take into account the investment made by the operator and allow him a reasonable rate of return on adequate capital employed, taking into account the risks involved*" and "*shall ensure that any cost recovery mechanism or pricing methodology that is mandated serves to promote efficiency and sustainable competition and maximise consumer benefits*". Further, Article 13(3) provides:

*"Where an operator has an obligation regarding the cost orientation of its prices, the burden of proof that charges are derived from costs including a reasonable rate of return on investment shall lie with the operator concerned. For the purpose of calculating the cost of efficient provision of services, national regulatory authorities may use cost accounting methods independent of those used by the undertaking. National regulatory authorities may require an operator to provide full justification for its prices, and may, where appropriate, require prices to be adjusted".*

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<sup>14</sup> Bottom-up long run incremental costs.

<sup>15</sup> 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.



When setting out the principles for an appropriate costing methodology, the Non-discrimination and Costing Recommendation takes due account, among other things, of the principle of cost recovery.

After carefully considering Telenor's remarks, ESA considers that Nkom has provided convincing clarifications and assurances that the proposed approach is in line with the principle of cost recovery. The partial update of the LRIC model takes into account the development in demand for both copper and fibre since the inception of the model and includes adjustments for inflation and an update of the WACC following a sound approach and based on reliable sources. Moreover, ESA notes that Nkom has duly explained why alternative approaches, such as a complete overhaul of the LRIC model and the modern equivalent asset method, would not be appropriate, considering the technical and resource challenges and the short remaining lifespan of the copper access obligation.

Furthermore, as mentioned in the previous comment, ESA agrees with Nkom that the concern for price stability and predictability is justified, whereas the risk of distorting investment incentives is very limited in the present decommissioning phase. In this respect, ESA considers that Nkom's approach takes duly account of the considerations in recital 25 of the Non-discrimination and Costing Recommendation:

*"A costing methodology that leads to access prices replicating as much as possible those expected in an effectively competitive market is appropriate to meet the objectives of the Regulatory Framework. Such a costing methodology should be based on a modern efficient network, reflect the need for stable and predictable wholesale copper access prices over time, which avoid significant fluctuations and shocks, in order to provide a clear framework for investment and be capable of generating cost-oriented wholesale copper access prices serving as an anchor for NGA services, and deal appropriately and consistently with the impact of declining volumes caused by the transition from copper to NGA networks, i.e. avoiding an artificial increase in wholesale copper access prices which would otherwise be observed as a result of customers migrating to the NGA network of the SMP operator".*

That being said, ESA calls on Nkom to consider strengthening, in the final decision, its reasoning with regard to compliance with the cost recovery principle, in particular by including the information provided to ESA during the notification procedure. Moreover, ESA calls on Nkom to pay particular attention to monitoring that, until the end of their period of application, copper access prices will continue to ensure effective cost recovery, along with price stability and predictability.

### **Need to ensure transparency of the costing approach**

ESA takes note of Telenor's concerns related to the transparency of Nkom's approach, particularly with respect to the assumptions and the calculations underpinning the update of the LRIC model.

Besides being a general principle of EU law and EEA law, the principle of transparency is specifically laid down, with regard to the intervention by NRAs, in Article 3(3), Article 6 and Article 8(4)(d) of the Framework Directive, as well as in Article 5(3) of the Access Directive. The Non-discrimination and Costing Recommendation contains multiple references to the principle of regulatory transparency, for example in recitals 44 and 47, and in points 38, 40 and 42.

ESA takes concerns regarding transparency seriously and therefore urges Nkom to consider whether more transparency can be ensured, both during exchanges with the operator subject to regulation (and possibly with other operators), in the national consultation and in its final decisions. ESA acknowledges the need to ensure

confidentiality of business secrets and certain other information. While taking due account of confidentiality interests, ESA is nonetheless of the view that Nkom should pay particular attention to the importance of sharing as much information as possible with market participants, notably with the operator subject to regulation, in order to allow a better understanding of its decisions and of the basis for regulation. The information that could be made available may for example include, where appropriate, the calculations in Tables 1 and 2 in section II above and, more generally, the information submitted by Nkom to ESA during the notification procedure.

#### 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, Nkom 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 Recommendation,<sup>16</sup> 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 days<sup>17</sup> 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 Eivind Campbell Lillesveen.*

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<sup>16</sup> 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 ESA's website [here](#) ("the Procedural Recommendation").

<sup>17</sup> The request should be submitted through the eCOM Registry, marked for the attention of the eCOM Task Force.