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### Nkom's response to the Authority's follow-up questions - Markets 3a, 3b and 4

The Norwegian Communications Authority (Nkom) refers to the EFTA Surveillance Authority's (the Authority) follow-up questions in e-mail dated 23 November 2018 regarding issues related to Nkom's notification of the draft decisions in Markets 3a, 3b and 4.

In the following, Nkom will provide answers to the questions raised by the Authority in its request.

Yours sincerely,

Einar Meling  
Acting Head of Section

Eivind Skaar Briseid  
Senior Adviser

*Electronically approved. No signature required.*

### Follow-up Questions for NKOM:

1. Can NKOM please clarify whether the requirement to provide access to cabling routes in market 3a includes access to ducts?

**Nkom:** Nkom can confirm that the requirement to provide access to cabling routes in Market 3a includes access to ducts. Nkom has in para 396 in the Market 3a draft decision referred to the definition of civil engineering infrastructure in Article 11 of the NGA recommendation, which includes ducts. In para 397 in the Market 3a draft decision, we state that this definition is the starting point for specifying the obligation of access to cabling routes more precisely in the decision. However, we can see that it could be useful to include examples of different kinds of infrastructure Telenor has to provide access to (including ducts, manholes, pipes, poles and masts), as a response to reasonable requests from access seekers. In retrospect, we also see that a more appropriate English translation of the Norwegian term “føringsveier” would be “civil engineering infrastructure”.

2. Please confirm whether ESA’s understanding is correct that NKOM proposes to require Telenor (in both markets 3a and 3b) to apply cost-oriented prices for all related wholesale access services (e.g. access to cabling routes (market 3a only), establishment, co-location, backhaul, access to information and support systems, etc.) based on fully-distributed historical costs. Please also clarify if such access prices will be subject to any ex ante/ex post review by NKOM.

**Nkom:** Nkom can confirm that we propose to require Telenor to apply cost-oriented prices for all related wholesale access services in Market 3a and 3b based on fully distributed historical costs, except for wholesale access services related to VULA/VUA products, cf. Section 7.3.11 in the Market 3a draft decision and Section 7.3.10 in the Market 3b draft decision. Nkom imposes in the Market 3a and 3b draft decision an obligation for Telenor to offer prices for VULA/VUA products, which entails that the access buyers are not subject to margin squeeze. The VULA/VUA products will be subject to margin squeeze tests, and related wholesale access services will be included in these tests. Nkom therefore believes that there is no need for further price regulation of wholesale access services related to VULA/VUA products.

Nkom proposes to require Telenor to report cost accounts for related wholesale access services based on fully distributed historical costs. The obligation to report cost accounts includes co-location, backhaul services and local, physical access to copper-based access networks, cf. Section 7.3.11 in the Market 3a draft decision and Section 7.3.10 in the Market 3b draft

decision. In the draft decisions, Nkom requires Telenor to report the cost accounts to Nkom on a yearly basis. Nkom will use these reports to verify that the cost-orientation requirement has been fulfilled by Telenor.

3. Please explain why NKOM considers the proposed obligation for Telenor to provide drop cables to “homes passed” in markets 3a and 3b to be proportionate and justified and why other less intrusive measures would not address the potential competition problem identified.

**Nkom:** The take-up rate of high capacity services in Norway, in areas where such services have been deployed, is significantly higher than the EU average. While NGA coverage according to DESI 2018 is at similar level (82% vs 80%), the take-up rate in Norway is 54% while the EU average is 33%. One major reason for this is a project based deployment based on actual demand within each project area. Usually, Telenor and other providers would deploy FTTH infrastructure if and only if a fairly high proportion of the potential customers sign up in advance. For its own retail operation Telenor gives the possibility to connect customers at a later point of time, i.e. after the project structure in terms of customer drop cables has been decided/implemented. In Nkom’s view, to exclude access seekers from the possibility of providing access to such customers would imply a discrimination between Telenor’s retail arm and the access seekers.

While it could be considered a less intrusive measure to allow the access seekers themselves to construct a drop cable, this approach has some significant drawbacks making it a far less effective remedy:

- The FTTH network deployment by Telenor is to a large extent outsourced to construction and installation companies not owned by Telenor, and it is likely that there will be geographic variations with regard to selection of construction/installation companies. From both a quality perspective and a cost perspective, it would be advantageous to avoid too many different construction/installation companies being involved in a single FTTH project.
- So far, the access seekers has been operators with limited own access infrastructure. The transaction costs alone associated with identifying and hiring of a construction company for any digging required and an installation company for connecting the drop cable to the GPON tree<sup>1</sup> is likely to constitute a severe barrier to entry, compared to the possibility of acquiring construction and installation services through Telenor’s framework agreement in each project area.

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<sup>1</sup> *Network security clearances might be required for the installation company.*

- The risk associated with investing in a drop cable would generally be higher for an access seeker than for Telenor. If the end user decides to terminate the agreement with the access seeker, the investment associated with the drop cable will be stranded. On the other hand, for Telenor, a termination of the end user agreement leaves the company with the possibility of providing wholesale access to the line at any point of time.
- Allowing an access seeker to deploy one element in a GPON network otherwise operated as one single network, could lead to an unclear delineation of responsibilities.

Another approach could be to impose an obligation on Telenor to allow access seekers to make use of Telenor's contracts with construction/installation companies. However, this would probably require modifications to Telenor's current contracts. In light of the geographical segmentation of contracts, the transaction cost for the access seeker to enter into contracts with a range of construction/installation companies could again turn out to be prohibitive.

Finally, one could also foresee a scheme where access seekers are invited to order the installation of drop cables to their retail customers prior to the SMP operator securing a contract with end customers in a certain area. This approach was suggested as a less intrusive remedy by the Commission in conjunction with Erhvervsstyrelsen in Denmark imposing a similar obligation on TDC<sup>2</sup>. While this approach might be an effective remedy during the initial project stage, it should be noted that:

- The Ministry of Transport and Communications has in its decision 18 December 2014 raised a concern that providing for sales from Telenor and access seekers in parallel in potential FTTH projects could lead to a slowdown in FTTH deployments, cf. Section 7.2.8 in the Market 3a draft decision.
- As the take-up rate is a critical factor in the investment decision and the level of sales activities arising from this, it is more likely that so-called "densification sales" will take place after the project has been completely installed. At this stage, the planning mechanism suggested by the Commission would not be relevant.

To summarize, Nkom cannot see how any other, less intrusive remedies are likely to address the potential competition problems arising from the first-mover advantage of Telenor in FTTH projects. At the same time, Nkom believes that the chosen solution, where the access buyers

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<sup>2</sup> <https://circabc.europa.eu/ui/group/2328c58f-1fed-4402-a6cc-0f0237699dc3/library/0a8b8d46-ca2b-4479-952f-07ef8f14d98a/details>

enter into the same regime for homes passed as Telenor's retail business uses, cf. para 351-354 in the Market 3a draft decision, does not incur an unreasonable burden on Telenor. Telenor will only be mandated to establish new infrastructure on the request of access buyers in cases where Telenor itself has identified the location as relevant for densification sales.

4. Please also explain how using Telenor's own retail fixed establishment fee as the wholesale price cap for the establishment of drop cables to "homes passed" is considered proportionate and justified. In your reply, please clarify how this approach would not limit the scope for retail pricing flexibility and differentiation in this market, potentially leading to de facto retail price regulation.

**Nkom:** Telenor has established a regime which enables its own retail operations to provide access to homes passed. Overall, the notified draft obligation on Telenor to provide access to homes passed requires Telenor to include external buyers of access into this regime. When it comes to specific price regulation related to such access, Nkom has assessed on one side, the need for Telenor to recover the costs of connecting the home passed, and on the other side, the need to make sure that the obligation to provide access to homes passed may be efficiently utilised by the access seekers.

Connecting a home passed will result in an enlargement of Telenor's fibre-based access network. Telenor's possible sources for recovering the related costs will be retail revenues or wholesale revenues. The period for recovering the cost will be the lifetime of the asset. For an access seeker, the possible source for recovering an establishment fee related to the deployment of a drop cable will be retail revenues only. The period for an access seeker to recover this cost will be equal to the period of providing retail services to the connected retail customer. Thus, the higher the fee for establishing a connected home, the higher the risk of the access seeker not recovering the establishment fee.

At the same time, it is clear that Telenor will incur costs when connecting homes passed. In Nkom's view, the notified margin squeeze regulation allows Telenor to recover those costs also when providing access to external access seekers. It is Nkom's understanding that the Danish NRA has not allowed the SMP operator to charge a higher wholesale fee when connecting a home passed on request from an access seeker, then the fees related to establishing wholesale access to an already connected home. However, Nkom has found it proportionate to allow Telenor to charge an establishment fee when connecting a home passed. In order to make the access obligation effective, Nkom believes there is a need to set a cap to what this charge may be. The establishment fee charged by Telenor's retail operations when connecting a home passed, would in Nkom's view serve as a transparent proxy for the costs Telenor may be assumed to charge its own retail arm. In Nkom's view this price cap is in line with the principle mentioned above requiring Telenor to include external buyers of access into the regime applicable to its own retail arm.

Nkom cannot see that the setting of a flexible price cap could potentially lead to de facto retail price regulation. The obligation does not require Telenor to set the establishment fee at a certain level, but is aligned to allow access seekers the same opportunity to provide access to homes passed as Telenor's own retail arm. Furthermore, when setting the establishment fee, Telenor may to some extent be disciplined by the potential threat that other providers may deploy NGA infrastructure to homes passed in a certain area. Considering that the retail market is national, Telenor may also to some extent be disciplined by establishment fees from providers deploying NGA infrastructure in other areas.

5. For SHDSL, please explain what is meant by the requirement to ensure that the pricing does not deviate significantly from the current level.

**Nkom:** Given the challenges in modelling LRIC costs for SHDSL services, Nkom has considered other alternatives for price regulation for SHDSL. Nkom has concluded that it is not appropriate to continue price regulation based on cost orientation for SHDSL only. Nkom has also concluded that removing price regulation completely for SHDSL may have unintended competitive effects. The price regulation for SHDSL is therefore a less strict regulation which reflects the market development. The number of SHDSL wholesale bitstream subscriptions has fallen by almost 20% from the end of first half of 2017 to the end of first half of 2018. In the same period the share of SHDSL accesses of all wholesale bitstream accesses fell from 8.3% to 7.5%. Nkom believes this regulation balances the need for predictability for the alternative providers and the incentives for Telenor to change prices unduly.

Any price change from Telenor will be assessed on a case-by-case basis. Telenor will have to document and justify price changes based on objective criteria, i.e. changes to relevant underlying costs. Nkom will specify this further in the final decision.

6. As regards the margin squeeze test, please explain how the proposed allocation of the subscriber acquisition cost reflects the principles set out Annex II, point (v) of the Commission's 2013 Recommendation on consistent non-discrimination obligations and costing methodologies.

**Nkom:** Nkom has assessed the relevant time period and test method for performing margin squeeze tests (MST), cf. Section 3.6 in the MS principle document (Annex 3 to the Market 3b draft decision). Nkom concluded that a steady state approach is the most suitable approach in Norway, because it provides information on margin squeeze for each individual period. At the same time, costs and revenues are properly allocated over time and discounted where appropriate. A periodic MST based on a steady state approach can also take market developments into account, as it provides Nkom with the opportunity to adjust subscription numbers, price changes, etc. on the basis of real market data instead of uncertain forecasts.

The steady state approach implies that all revenues and costs are broken down to the specific time period covered by the MST. Revenues and costs are, however, allocated according to cost causation. This means that the investment costs are allocated according to their economic life. Where appropriate, non-recurring costs and revenues will also be allocated in accordance with the economic cost causation for the relevant time period, e.g. average customer lifetime or asset lifetime. Recurring costs are, however, allocated to the period they occur.

Nkom has assessed how customer-related downstream costs should be included in the MST, and concluded that it is appropriate to distribute one-off costs over the customer's average life expectancy. However, Nkom has not found it appropriate to annualize other downstream costs, and have therefore allocated subscriber acquisition costs to the period in which they occur.

The relevant text in Annex II, point (V) of the Commission Recommendation on consistent non-discrimination obligations and costing methodologies, states that:

The relevant period for this *ex ante* economic replicability test should be set in accordance with the estimated average customer lifetime. Such average customer lifetime would be the period of time over which the customer contributes to the recovery of the (a) downstream costs that are annualised according to a depreciation method that is appropriate to the asset in question and the economic lifetime of the corresponding assets required for the retail operations (including network costs that are not included in the wholesale NGA access service) and (b) other downstream costs that are normally not annualised (typically the subscriber acquisition costs) and which the operator incurs to gain customers and should seek to recover over the latter's average lifetime.

It is Nkom's understanding that the Annex II, point (v) of the Commission Recommendation establishes that the economic replicability test should be designed so that the SMP provider is able to cover its downstream costs during the course of their average customer lifetime. The Recommendation defines the average customer lifetime as the period in which end-users contribute to cover two categories of downstream costs.

In Nkom's view, this part of the Recommendation should not be read as a guidance that ERTs in general should allocate downstream costs over the SMP provider's average customer lifetime. Nkom refers to the wording of the second category (b) of the cited part of the Recommendation which states that sales and acquisition costs fall under the category "other downstream costs that are normally not annualized". If the Commission intended to suggest that NRAs should deviate from this norm when performing an ERT, Nkom believes that this would follow clearly from the Recommendation.

Nkom also notes that Telenor has a complaint pending for the Ministry of Transport and Communications related to, amongst others, the allocation of sales and acquisition costs in our current 2014 decision in former market 5.

7. Please also clarify how NKOM views the use of HCA principles for calculating copper LLU prices as consistent with the Commission's 2013 Recommendation on consistent non-discrimination obligations and costing methodologies, bearing in mind also that, according to the 2016 BEREC Regulatory Accounting in Practice report, only four EU countries still used HCA as their cost base for Market 3a.

**Nkom**: Nkom refers to Annex 5 of the Market 3a draft decision: "Modelling the costs of copper networks in the Norwegian context". This document was written by Analysys Mason as part of their development of the cost model on behalf of Nkom, and provides the background for the use of HCA principles for calculation copper LLU prices in Norway.

In particular, Section 4 describes why HCA is an appropriate choice in the Norwegian context (and sets out relevant points from previous similar decisions made in the UK and Lithuania). Section 6 describes how Nkom's approach is consistent with the EC's Recommendation.