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Draft - Decision to amend the decisions in Markets 3a and 3b – Obligation to maintain access to copper-based access networks

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1 Background

1.1 Introduction

1. On 20 December 2018, the Norwegian Communications Authority (Nkom) adopted a decision to designate a provider with significant market power and to impose specific obligations (Market Decisions) in the wholesale markets for local and central access to fixed access networks (Markets 3a and 3b). Based on identified competition problems, obligations were imposed on Telenor relating to access, price and accounting controls, non-discrimination, transparency and accounting separation in these two wholesale markets.
2. At the end of January 2019, Telenor announced that the company had decided to decommission the copper network by the end of 2022, and that copper access would be replaced by fibre-based or wireless broadband access^{1,2}. Telenor's decision to close down the copper network by the end of 2022 can have a potential major impact on competition in the broadband markets, and it had not been communicated externally when Nkom made the decisions in Markets 3a and 3b on 20 December 2018. Nkom has therefore deemed it necessary to assess whether the decommissioning of the copper network entails a need to clarify or reassess current obligations, or to impose new obligations, in Markets 3a and 3b.
3. In this decision, the terms '*closing down*', '*decommissioning*', '*discontinuation*' and '*modernization*' are all used interchangeably to refer to Telenor's plan to close down the copper network infrastructure and partially replace it with other infrastructure. The term "*modernization*" has particularly been used by Telenor in their market communication. When Nkom makes use of this term in this decision, this does not imply that Nkom considers all aspects of the decommissioning of the copper network and the actions taken to replace it as a modernization.
4. In Nkom's view, there are no grounds for concluding that Telenor's significant market power in Markets 3a and 3b will lapse as a consequence of Telenor's decision to decommission the copper network. Telenor's grounds for decommissioning the copper network are that this is a necessary modernisation of the company's broadband infrastructure. The decision hence appears to be a strategic decision based on an assessment of the technological and market

¹ Cf. page 7 of Telenor's quarterly presentation for the Q4 2018: <https://www.telenor.com/wp-content/uploads/2018/10/Telenor-Q4-2018-presentation-e037eebf34e67c85b4a3ea0be22e1d5f.pdf>

² Referred to in the following as "fibre and mobile-based solutions etc."

development in relation to the company's goals and visions. Nkom assumes that Telenor does not make strategic decisions which entail an overall significant weakening of the company's market position in the broadband markets, when compared with alternative strategic decisions that could have been made by the company.

5. Nkom furthermore points out that the decommissioning of the copper network is not occurring as a consequence of regulatory orders or other exercising of authority. On the contrary, Telenor itself has decided that the copper network is to be decommissioned within a fixed end date that has been communicated to the market, and the process pursued by the company vis-à-vis access buyers in this respect.

6. On this basis, Nkom cannot see that Telenor's decision to decommission the copper network makes it necessary or expedient to conduct a new analysis of whether Telenor has significant market power in Markets 3a and 3b during the current regulatory period.

7. In the following, Nkom has assessed whether Telenor's decision to decommission the copper network by the end of 2022 will contribute to aggravating the competition problems that form the basis for the obligations imposed on Telenor in the Market Decisions, and might potentially create new competition problems. In particular, the decision to set a specific end date for the copper network, whereby the end date entails the relatively rapid decommissioning of the entire copper network, when viewed in relation to Telenor's behaviour in the market, leads Nkom to believe that it's necessary to assess whether the decommissioning of the copper network is creating new or increased competition problems. This applies to Telenor's actions with regard to the timing of Telenor's provision of wholesale offers for products marketed by the company as replacement products, and furthermore which information Telenor otherwise gives external access buyers concerning their opportunities for access in Telenor's broadband infrastructure.

8. Nkom is of the view that it has been important for the development of competition in the retail market for fixed broadband access over the past 10-15 years that Telenor's competitors have had predictable framework conditions for establishing their own access networks and have also been able to base their retail services on regulated wholesale access to Telenor's nationwide copper network (and to Telenor's fibre network in recent years), in combination with their own infrastructure³. The investment horizon for access buyers concerning both their own

In this context, ³"own infrastructure" refers to the establishment of the access buyers' own fibre-based access networks and to the establishment of their own broadband nodes related to Telenor's copper lines.

infrastructure and in customer relationships has been a key element in assessing the need to extend the period with access rights in the copper network beyond the plans that Telenor has had in conjunction with modernisation and the notice periods set out in the Market Decisions, cf. Chapter 3.3.1.

9. Based on the manner in which Telenor is carrying out the process of decommissioning the copper network in relation to end users and external access buyers, Nkom is of the view that several of the competition problems related to vertical transfer of market power described in the Market Decisions could potentially be amplified as a consequence of Telenor's decision regarding, and the implementation of, the decommissioning of the copper network by the end of 2022. Nkom notes in particular that by not providing external access buyers with the same opportunities as Telenor's own retail activity to offer replacement products in the retail market based on other access technologies, Telenor confirms the competition problems already identified relating to denial of access and various forms of discriminatory behaviour.

10. Nkom acknowledges that other broadband providers can, to a certain extent, establish new access networks for customers who lose copper based broadband access. Nkom also acknowledges that the access regulation in Markets 3a and 3b should not contribute to limiting potential infrastructure-based competition in the retail market or to weakening the incentives for further fibre deployment. At the same time, Nkom believes that it would be very unfortunate for the investment incentives, cf. Chapter 3.3.1, and thereby for the competition situation in the retail market, if competition problems identified in Markets 3a and 3b are amplified as a consequence of the decommissioning of the copper network without this being reflected in how Telenor's obligations in these wholesale markets are designed.

11. Even though Telenor's decision to phase out the copper network by the end of 2022 will not necessarily create new types of competition problems beyond those already referred to in the Market Decisions, on the basis of the aforementioned, Nkom has concluded that, due to the decommissioning of the copper network, there is a need to change the access obligation imposed on Telenor in the current decisions concerning Markets 3a and 3b. Nkom considers this to be necessary to ensure that the regulation of these wholesale markets continues to provide incentives for continued investments from both access buyers and Telenor and also preserves competition in the retail market.

1.2 Draft decision for national consultation on amendments to the decisions in M3a and M3b

12. Nkom published a draft decision for national consultation on amendments to the decisions in Markets 3a and 3b on 20 December 2019.

13. The main conclusions in the draft decision were as follows:

- a) In accordance with Section 10-3 of the Norwegian Electronic Communications Act, an obligation will be imposed on Telenor to report on the reclassification of individual fibre accesses to systematically developed access networks.
- b) In accordance with Section 4-1 of the Norwegian Electronic Communications Act, Telenor will be subject to an obligation not to withdraw copper-based access provided in M3a or M3b until Telenor has offered relevant replacement products.
- c) In accordance with Section 4-1, cf. Section 4-7, of the Norwegian Electronic Communications Act, an obligation will be imposed on Telenor to ensure there is a migration process from copper-based infrastructure to fibre and mobile-based infrastructure. The migration process must be transparent and non-discriminatory.
- d) In accordance with Section 4-9 of the Norwegian Electronic Communications Act, an obligation will be imposed on Telenor to offer access to ODP in their fibre-based access network at cost-oriented prices. The cost-orientation requirement must be based on an LRIC/LRAIC approach.
- e) Based on information received from Telenor, Nkom does not consider that the current non-discrimination obligation based on Equivalence of Output (EoO) has been effective enough, and that this indicates that, pursuant to Section 4-7 of the Norwegian Electronic Communications Act, there is a basis to develop the replacement products for copper access at wholesale level within the framework of Equivalence of Input (EoI).

14. This decision addresses the conclusion in (b) and (c) of the overview. The other conclusions in the draft decision from 20 December 2019 will be addressed at a later date.

2 Concerning the draft decision, consultation responses and Nkom's assessments of these

2.1 Key aspects of the draft decision for national consultation

15. Nkom concluded, cf. Chapter 3.1 of the draft decision, that, pursuant to Section 4-1 of the Norwegian Electronic Communications Act, Telenor will be required not to withdraw copper-based access provided in Market 3a or Market 3b until Telenor has offered relevant replacement products. In Nkom's view, such an obligation was necessary on the basis of the fact that Telenor does not offer external access buyers access to replacement products or information with the content imposed on the company in the Market Decisions. In combination with Telenor's public announcement that the copper network would be decommissioned by the end of 2022, this had created uncertainty as to whether access buyers would still be able to offer such retail services currently offered by the access buyers based on access to Telenor's copper access network.

16. Nkom furthermore concluded that mobile-based wholesale products do not constitute a functional substitute for copper-based access products in Markets 3a and 3b. The assessment concerned both the limited coverage and the service quality.

17. Nkom also concluded that VULA fibre will only be a substitute for copper-based access products in Market 3a to a limited extent. Among other things, Nkom referred to how the geographical coverage for Telenor's offer of VULA fibre is very modest compared to offers of access to the copper network, and that the access product does not constitute a financial substitute for copper-based access products.

18. Nkom concluded, cf. Chapter 3.1 of the draft decision, that in accordance with Section 4-1, cf. Section 4-7, of the Norwegian Electronic Communications Act, Telenor will be required to ensure there is a migration process from copper-based to fibre and mobile-based infrastructure that is transparent and non-discriminatory.

2.2 Comments received on the draft decision for national consultation

19. GlobalConnect, NextGenTel, Telenor and Telia have commented on the draft decision. On 28 January 2020, Nkom invited the operators to submit comments on the consultation responses received by 11 February 2020. GlobalConnect submitted comments.

20. All of the comments are available on Nkom's website.⁴ Below, Nkom summarises and assesses the comments on the draft decision.

2.2.1 Statutory authority

2.2.1.1 *Comments from the operators*

21. **Telenor** is of the view that the wording in Section 4-1 of the Norwegian Electronic Communications Act does not support that the authority has the competence to require Telenor to maintain existing infrastructure or establish new infrastructure. In Telenor's opinion, the provision solely authorises the opportunity to impose an obligation on the regulated operator to provide access to existing facilities and infrastructure, as clearly stipulated in the preparatory remarks to the Norwegian Electronic Communications Act. Imposing an obligation on a network owner to maintain infrastructure and facilities that the network owner considers inappropriate or unprofitable is an intrusive obligation that requires a clear statutory basis. Telenor does not consider Nkom's reference to Article 12(1) (c) of the Access Directive, and interpretation of the wording of this, to be correct, because the Article concerns access to and use of existing network facilities. Article 12 (c) states that an obligation can be imposed to refrain from withdrawing access to a facility, but not that the network owner can be required to maintain the actual facility. Nkom's reference to the judgment of the Borgarting Court of Appeal is not relevant either to the interpretation of Section 4-1 of the Norwegian Electronic Communications Act in this respect.

22. Telenor furthermore notes that the Commission's NGA Recommendation cannot be used to impose obligations on Telenor that are not stipulated in the Norwegian Electronic Communications Act and believes that Nkom applied an incorrect understanding of paragraph 39 of the Recommendation. The NGA Recommendation does not entail an obligation to maintain infrastructure, and it cannot be interpreted to mean that copper-based infrastructure cannot be decommissioned if the network is unprofitable because other infrastructure has been established. The Recommendation's requirements concerning process and replacement products must be interpreted in the light of the fact that the most relevant issue when the Recommendation was prepared in 2010 was the continued regulatory requirement for an NGA network based on FTTC (modernised copper network), and the Recommendation is not

⁴ <https://www.nkom.no/ekom-markedet/markeder/marked-3a-og-3b-lokal-og-sentral-tilgang-til-faste-aksessnett>

intended for a fragmented market structure based on competition to deploy FTTH. This understanding of the Recommendation also appears to have been applied by Nkom in the current and previous regulation.

23. **GlobalConnect** supports Nkom's proposal to require Telenor to maintain access to the copper network until actual replacement products are in place. GlobalConnect is of the view that Section 4-1, paragraph one of the Norwegian Electronic Communications Act provides broad statutory authority to require a provider with significant market power to accommodate reasonable requests regarding all forms of amendments to the access agreement. GlobalConnect also refers to how Article 12 of the Access Directive stipulates that providers with significant market power can be required "not to withdraw access to facilities already granted...". In remarks concerning Telenor's consultation response in this respect, GlobalConnect declares disagreement with Telenor's restrictive interpretation whereby the supervisory authority only has competence to impose access to "existing network facilities". GlobalConnect furthermore believes that the remedies document of the European Regulators Group (ERG) supports the conclusion that Nkom has the statutory authority to require a provider with significant market power to maintain infrastructure.

24. Even though this is not directly stipulated in Section 4-1 of the Norwegian Electronic Communications Act, **NextGenTel** is of the view that it must be assumed that Nkom is able to set conditions requiring Telenor to offer relevant replacement products in order to be able to withdraw copper-based access.

25. **Telia** agrees with Nkom's assessment that Section 4-1 of the Norwegian Electronic Communications Act grants the statutory authority to require Telenor not to withdraw access to the copper network until the company offers a relevant replacement product.

2.2.1.2 Nkom's assessment

26. Nkom disagrees with Telenor that the Norwegian Electronic Communications Act does not give the statutory authority to require Telenor not to withdraw access to the company's copper-based access network until Telenor offers a real substitute for such access.

27. With regard to Telenor's assertion that the wording in Section 4-1 of the Norwegian Electronic Communications Act does not support such an interpretation, Nkom refers to the assessments in Chapter 3.2 below, in which we provide grounds for how Section 4-1 of the Electronic Communications Act is to be interpreted on the basis of Article 12 of the Access Directive and in relation to the NGA Recommendation. For the sake of good order, Nkom would add that the list of access obligations which the NRA must be able to impose in accordance with

Article 12 no. 1 are solely examples of obligations for which a provider with significant market power can be required to comply with reasonable requests, and thereby does not constitute any specification of the limit to the access obligations that the NRA may impose. Nkom does not see a need to provide further grounds for the obligation under the draft decision having statutory authority pursuant to Section 4-1 of the Norwegian Electronic Communications Act. We also refer to how GlobalConnect, NextGenTel and Telia support Nkom's interpretation of this statutory basis.

28. Telenor is of the opinion that Nkom has incorrectly interpreted Article 12 (c) of the Access Directive, because it cannot be understood to mean that network owners can be required to maintain the actual facility. Nkom does not dispute that Telenor has the right to make changes to the access network, for example, closing a facility. However, Nkom is of the view that the rules provide a statutory basis to establish appropriate transitional arrangements in the event of changes to the network, when this is necessary to be able to safeguard competition in the market. Nkom is of the view that both Section 4-1 (which relates to access) and Section 4-6 (which relates to publication and reference offers) of the Norwegian Electronic Communications Act, together with the Access Directive and the NGA Recommendation, provide the statutory authority to impose such transitional arrangements on Telenor.

29. On this basis, Nkom maintains that the Norwegian Electronic Communications Act gives Nkom the authority to require Telenor not to withdraw copper-based access until Telenor has offered relevant replacement products.

2.2.2 The requirement that Telenor must not withdraw copper-based access until relevant replacement products are offered

2.2.2.1 Comments from the operators

30. **Telenor** notes that Market 3a is limited to solely concern copper- and fibre-based networks. Access to fixed mobile broadband therefore cannot be imposed in Market 3a, and Telenor therefore believes that it is not particularly relevant to discuss whether such a product is a functional substitute for copper-based access.

31. Telenor furthermore refers to Nkom's assessment of Telenor's HBM/BBM product in the light of BEREC's requirements for a fixed broadband service. Based on Nkom's conclusion that mobile-based products are not a functional substitute for copper-based access, it is not possible to offer a relevant replacement product based on the mobile network. When Nkom sets

the requirement that an equivalent replacement product for copper-based access must be available before the copper network can be decommissioned, the consequence of this will be that, for some accesses, Telenor will be forced to maintain the copper network long into the future. Telenor considers this to be a very burdensome and intrusive obligation which will place major restrictions on Telenor's opportunities to modernise the fixed network, and is not a development that supports the authorities' objectives in the broadband area.

32. Telenor also refers to Nkom's conclusion that, due to pricing and limited geographical coverage, fibre-based access will only be a substitute for copper-based access products in Market 3a to a limited degree. Telenor believes that when Nkom then requires that a full replacement product for copper-based access must be available before the copper network can be decommissioned, the consequence will be that Telenor is required to construct fibre to all addresses before the copper network can be decommissioned.

33. **GlobalConnect** agrees with Nkom that it is necessary to require Telenor not to withdraw access to copper access lines and exchanges until there is an agreed migration plan and real replacement products are in place. GlobalConnect refers to how this is necessary in order to continue to service own customers, and also to compete for new customers going forward.

34. GlobalConnect is of the view that the mandatory requirement to maintain access that has been "granted" must include all of Telenor's accesses and exchanges in the copper network, and not only those already used by the wholesale customers to service their customers. GlobalConnect considers this to be necessary in order to compete for new customers, such as businesses with multiple geographical locations.

35. GlobalConnect also refers to how the company's fibre network has to a great extent been deployed according to a topology designed on the basis of Telenor's copper infrastructure and associated exchanges. Changes to the latter will entail that GlobalConnect will have to restructure its network, which will require major investments and take a long time.

36. GlobalConnect supports Nkom's assessment that fixed mobile broadband has technical limitations, particularly in relation to the service quality, so that it cannot be considered a substitute for copper-based access products.

37. With regard to VULA fibre, GlobalConnect agrees with Nkom that this product does not constitute a financial substitute for copper-based access. GlobalConnect disagrees with Nkom, however, that VULA fibre constitutes a technical substitute for copper-based access. In a number of respects, the functionality of VULA fibre is limited compared to the copper-based

LLUB product. The reasons for this include that access is granted at BNG level, that access buyers are required, in practice, to use Telenor's transmission network, restrictions in the PON technology and the fact that access buyers must use the service platform selected by Telenor. GlobalConnect believes that the characteristics of VULA fibre indicate that the service is part of Market 3b, and not Market 3a.

38. **NextGenTel** is of the view that it must be assumed that Nkom can set the condition that Telenor must offer relevant replacement products in order to be able to withdraw copper-based access. NextGenTel is also of the view that it is necessary to set such a condition to ensure that the objective of the regulation is achieved. Failure to offer replacement products could result in a significant reduction of competition in the retail market for fixed broadband access.

39. NextGenTel points to how the NGA Recommendation sets a five-year notice period for the decommissioning of copper accesses. This applies unless access is offered that is equivalent to the access scheduled for decommissioning. NextGenTel is therefore of the view that it would not be disproportionately burdensome or unreasonable to set the condition that Telenor must offer relevant replacement products in order to withdraw copper-based access.

40. NextGenTel makes further reference to Nkom's grounds in the Market 3a Decision for continuation of the three-year notice period for decommissioning copper access lines. In this connection, Nkom referred to how the notice period would not necessarily limit Telenor's opportunity to further develop the "copper access network". NextGenTel finds that this justification is no longer relevant since that the copper network will now be decommissioned. At the same time, NextGenTel can accept a shorter phasing out period than according to the NGA Recommendation, provided that access to replacement products is offered.

41. With regard to fixed mobile broadband, NextGenTel takes the view that it should be sufficient to require Telenor to offer access to a replacement product that is equivalent to the replacement products offered by Telenor's own retail arm to end users in connection with the decommissioning of the copper network. To ensure competition, NextGenTel takes the view that it is particularly important that Telenor is required to provide access to a mobile-based replacement product relatively quickly, which must be viewed in the light of the fact that mobile broadband access will most likely be the only alternative for a large number of copper accesses that are to be phased out.

42. NextGenTel takes the view that access to the mobile-based replacement product does not need to be a real substitute to copper-based access in the short term. In the longer term,

however, a plan should be drawn up to improve the product, to make it a real substitute for copper-based access. Without access to a mobile-based replacement product, NextGenTel would be left without any opportunity to continue customer relationships at locations where the copper access is suddenly to be discontinued. This will apply, for example, if the copper network is damaged in connection with excavation work and Telenor believes that it would not be profitable to repair the damage.

43. **Telia** supports Nkom's notified obligation for Telenor not to withdraw copper-based access until the company can offer relevant replacement products. Telia considers this to be crucial to addressing the threat that the decommissioning of the copper network poses to competition in the broadband markets.

44. Telia notes that Telenor offers replacement products to its own end users, but has deliberately neglected to offer the same to access buyers. This prevents access buyers from being able to compete on equal terms with Telenor's retail activity.

2.2.2.2 Nkom's assessment

45. In its comments, Telenor has referred to how M3a is limited to copper and fibre-based networks and that it is therefore still not possible to impose access to fixed mobile broadband in this market. Telenor also believes it is not particularly relevant to discuss whether fixed mobile broadband is a functional substitute for copper-based access. Nkom does not disagree with Telenor's description of the current delineation of M3a. If Nkom had concluded that fixed mobile broadband could be a relevant replacement product for copper-based access in M3a (i.e. replacement products for LLUB/SLU), Nkom would not be able to impose an access obligation for fixed mobile broadband in this market without making changes to the market analysis that is the basis for the current decisions. Nkom disagrees with Telenor, however, that it is not particularly relevant to discuss whether fixed mobile broadband can be a functional replacement product for copper-based access, in particular in relation to the copper-based access that is available in M3b ("DSL Broadband Access"). Nkom believes that there is a need to also replace this form of copper-based access, as the consultation comments from Telenor's wholesale customers show, among other things.

46. In Telenor's assessment, the notified requirement not to withdraw copper-based access until relevant replacement products are offered will force the company to maintain the copper network long into the future, and it will not support the authorities' objectives in the broadband area. Nkom disagrees with this assessment. Nationwide access to access networks

has been and remains vital to competition in a number of segments of the relevant retail markets. When Telenor has chosen to decommission the copper network without offering access buyers relevant replacement products and has furthermore not provided information that enables access buyers to safeguard their end users on equivalent terms to Telenor's own retail activity, this might be to the extensive detriment of competition in the broadband markets. In Nkom's view, the notified obligation is necessary to remedy this detrimental effect. Nkom furthermore maintains that such an obligation is proportionate, even if it will entail that the access obligation for the copper network will be for longer than the notification period imposed on Telenor in the Market Decisions.

47. Nkom also sees a need to give the operators, including Telenor and access buyers, greater predictability compared to that envisaged in the draft decision. Nkom therefore sees a need to change the design of the requirement so that the access obligation has a specific duration, cf. Chapter 3.3.4. The obligation will thus no longer entail that Telenor must offer relevant replacement products to all addresses before the copper network can be decommissioned, as Telenor states in its comments. Nkom refers to Chapter 3.3.2 below concerning the changed access obligation for copper-based access networks.

48. With regard to NextGenTel's comments that it should, in the first instance, be sufficient to require Telenor to offer access to a mobile replacement product that is equivalent to the replacement products which Telenor's own retail activity offers to end users in connection with the decommissioning of the copper network, Nkom refers to our "*Supplementary decision in Market 3b – Wholesale access to fixed mobile broadband*", dated [xx/yy/zz]⁵.

49. In GlobalConnect's comment that the VULA product Telenor is required to offer does not appear to be a technical substitute for copper-based access, the company refers, among other things, to conditions that are an inevitable consequence of access being granted as virtual unbundled access and not in the form of direct access to the transmission medium. The PON technology leads to limitations to possible forms of access, and this is the reason why NRAs in several EEA countries have imposed virtual access as a substitute for physical access⁶, without the European Commission or ESA having objected to this. In this context, Nkom refers to the supplementary decision determining final requirements of VULA fibre that was adopted on 31

⁵ The corresponding draft decision is notified to ESA on the same date as this decision.

⁶ Cf. Chapter 4.2.2 of the "Explanatory Note" to the European Commission's Recommendation concerning relevant markets.

March 2020. In the supplementary decision concerning VULA fibre, the question of handover points for the virtual access product is also discussed. In other EEA countries, too, regulated VULA products are offered for which the handover point is not always at OLT level.

50. Nkom notes that GlobalConnect, NextGenTel and Telia support the obligation under the draft decision that Telenor must not be able to withdraw access to the copper access network before Telenor offers relevant replacement products, and that the companies essentially also endorse Nkom's grounds for such an access obligation.

2.2.3 Requirement to ensure a migration process

2.2.3.1 *Comments from the operators*

51. **Telenor** refers to how the company has no final plan for all remaining customers in the copper network, but only has hypotheses regarding which infrastructure is best suited, based on a snapshot view. The market dynamic entails continuous changes to the plans. Furthermore, Telenor cannot see how it would be possible to draw up a migration plan for as long as the replacement products used by Telenor are not equivalent alternatives, according to Nkom, and thereby cannot be part of the plan.

52. Telenor is also of the view that the Broadband Forum is not particularly suitable to determine a migration plan for the wholesale customers. Sharing long-term analyses of possible fibre projects would entail sharing information that is competition-sensitive in a fully competitive market. Telenor further states that they cannot share analyses of the mobile network with competing mobile operators without this being in conflict with the rules in the Norwegian Competition Act.

53. Telenor is also of the view that it is not particularly relevant to refer to the processes for migration to new infrastructure in the UK and Italy, as Nkom has done. Telenor considers Denmark and Sweden to be more relevant reference markets than the UK and Italy, because the markets in Denmark and Sweden have significantly greater similarity with the Norwegian fixed broadband market. The markets in the UK and Italy provide little relevant guidance because they are typical "FTTC markets", where the copper infrastructure has been modernised and still plays a major role in the market. The scope of fibre and competing fibre operators is very limited.

54. **GlobalConnect** supports Nkom's notified requirement that Telenor must present a comprehensive migration plan which ensures a transparent and non-discriminatory migration process. In the final decision, Nkom must be clear about what this entails.

55. **NextGenTel** endorses Nkom's notified obligation for Telenor to prepare a migration plan and the minimum requirements Nkom has set for the content of such a plan. NextGenTel encourages Nkom to set specific deadlines for preparing the plan.

56. **Telia** is of the view that current market regulations must be changed to ensure a transparent migration process.

57. Telia also refers to the requirements in the NGA Recommendation for equal access to replacement products and information in connection with migration from the copper network to new technology. Telia agrees with Nkom that the recommendation must be given considerable weight when formulating migration plans and the access obligation. Telia furthermore agrees with Nkom that it is natural to consider both the forthcoming European Electronic Communications Code and European practice relating to migration processes when assessing whether Telenor should be required to prepare a plan for migration between Telenor and the access buyers.

58. Telia is also of the view that the NGA Recommendation must be assigned considerable weight in order to achieve harmonised practices within the EEA. It will therefore be natural to change the notice period for the decommissioning of copper accesses from three to five years, so that the notice period is in accordance with the Recommendation.

59. Telia also considers it important that Nkom ensures that there is a transparent process for the transition to the new infrastructure and that it is possible to order and receive actual replacement products before access to copper accesses is withdrawn. It is also necessary to require Telenor to quickly prepare a migration plan. Telia therefore requests Nkom to take a separate decision in this respect, to avoid Telenor undertaking further decommissioning of copper accesses.

2.2.3.2 Nkom's assessment

60. **Telenor** refers to how the company has no final plan for all remaining customers in the copper network, but solely has hypotheses regarding which infrastructure is most suitable, based on a snapshot view. Telenor furthermore refers to how the market dynamic entails continuous changes to the plans. Nkom nonetheless believes that it cannot solely be up to Telenor to make plans for migrating customers from copper to new platforms. In view of the significance of copper-based access to competition, cf. Chapter 3.3.1, Nkom believes that it is

necessary to have a migration process to which access buyers can also give input. Nkom furthermore refers to how a migration process based on such assumptions is applied in both the NGA Recommendation and the new migration rules in the Code.

61. Telenor cannot see how the company will be able to draw up a migration plan in the light of Nkom's determination that there are no relevant replacement products to which to migrate. In this connection Nkom refers to how, in the draft decision, we assessed mobile- and fibre-based replacement products as these existed as of the date of the draft decision. The requirement of a migration plan assumes the further development of the aforementioned replacement products, or the offer of new replacement products, for these to be considered to be a relevant substitute for copper-based access, viewed from the perspective of wholesale customers. If Telenor does not launch replacement products that in terms of both functionality and coverage are relevant for the access buyers, this decision will entail that the obligation on Telenor to provide access to the copper network will be maintained for an interim period, cf. Chapter 3.3.4.

62. Even though the market situation is somewhat different in the UK and Italy, Nkom is of the view that it is relevant to refer to how other regulatory authorities accept migration plans from copper infrastructure to new infrastructure, provided that the regulated provider fulfils certain requirements. In view of how the same background law applies in the UK, Italy and Norway, there must also be a basis to make requirements of Telenor in this respect. Yet this does not necessarily mean that Nkom should set the same requirements as Ofcom and Agcom have done. The market situation in Norway will naturally be a factor in Nkom's more detailed assessment of the requirements that must be set for the migration process.

63. Nkom also refers to how GlobalConnect, NextGenTel and Telia support Nkom's proposal that Telenor must be required to ensure that there is a migration process.

64. In their consultation response, Telia has proposed to change the notice period to 5 years. Nkom is of the view that this proposal has been taken into account, in the light of the implication of this decision being that the requirement for Telenor to provide access to the copper network will be maintained for an interim period, cf. Chapter 3.3.4. Hence, Nkom does not see a need to change the notice period to 5 years.

65. On this basis, Nkom upholds the mandatory requirement that Telenor must ensure that there is a migration plan.

2.2.4 Use of the Broadband Forum to obtain input for the migration plan

2.2.4.1 Comments from the operators

66. **Telenor** believes that the Broadband Forum is not particularly suitable to achieve a unified migration plan for wholesale customers. In this respect, Telenor refers to how the company cannot share information concerning fibre projects and analyses of the mobile network with other operators because this is information that is competition sensitive.

67. **GlobalConnect** disagrees with Nkom that the Broadband Forum is a suitable format to establish a consensual migration plan. The company refers to previous experiences with this format and is of the view that, in practice, this approach would allow for the extensive use of deferral and delaying tactics. GlobalConnect instead asks that Nkom impose a timewise tight procedure and specific deadlines, in combination with a description of the intrusive regulation Telenor will be subject to if the parties do not reach an agreement.

68. **NextGenTel** takes the view that the Broadband Forum can be a suitable forum to shed light on the matter, provided that this does not result in the work on the plan becoming more protracted.

2.2.4.2 Nkom's assessment

69. Telenor considers that the Broadband Forum is not particularly suitable to reach a unified migration plan, partly because the company cannot share information they deem to be competition sensitive, e.g. information concerning fibre projects and analyses of the mobile network. In Nkom's assessment, the consideration to protect competition-sensitive information must be weighed against access buyers' need to have all relevant information regarding the decommissioning of the copper network, including the replacement products that will replace copper-based access. In the Market decisions, Telenor is obliged to provide "*access buyers with notifications of the same quality as those provided to Telenor's retail arm*". The fact that analyses of the mobile network are required to decide upon where mobile based replacement products can be offered, cannot in Nkom's view imply that information on where those products are offered are not made available to the access buyers. Nkom will thus balance those considerations when determining the specific details regarding the content of the information. It is also foreseen in section 41 of the NGA Recommendation that national regulatory authorities must make trade-offs of this kind. This applies irrespective of whether or not the Broadband Forum is used to obtain the wholesale customers' input concerning the process.

70. When it comes to using the Broadband Forum as a starting point for obtaining input for Telenor's migration plan, Nkom notes that the parties to the consultation process have different

views on this. Based on past experience, some providers advise against the use of the Broadband Forum, while others believe the Broadband Forum can be used in the process going forward, given the right framework conditions. Nkom nonetheless believes that it would be expedient to establish an arena to obtain input for and achieve a dialogue concerning the content of the applicable migration plan, and considers it beneficial to use a forum that has already been established. As already stated in the draft decision, Nkom also understands that the forum cannot work under the same framework as when the objective was to reach an agreement on terms for upgrading the copper access network. Nkom furthermore notes that several access buyers give emphasis to measures to avoid a prolonged process. Nkom agrees this is necessary in order for this type of forum to be able to meet its objective, which is to determine a migration plan as quickly as possible which can thereafter be adopted by Nkom.

71. On this basis, Nkom maintains that it may be appropriate to use the Broadband Forum to obtain input for the plan.

3 Access to the copper-based access network

3.1 Introduction

72. As described above, Nkom published a draft decision with an obligation for Telenor not to withdraw copper-based access provided in Market 3a or Market 3b until Telenor has offered relevant replacement products. Nkom has seen reason to change the approach somewhat from the draft decision, and below it is reasoned that Telenor will be required to maintain access to the copper-based access network for a period of five years from the date of entry into force of this decision. Nkom also makes it possible for Telenor to decommission the copper access network at an earlier stage if Telenor offers relevant replacement products.

3.2 Regulatory basis

73. The copper access network has been the only nationwide, fixed access network in Norway, and for several years has been a vital platform for the production of, among other things, broadband services. Since 2001, Telenor has had an obligation to grant physical access to this network, and Telenor's access obligation has been continued in several market decisions, most recently in the Market Decisions from the end of 2018. As referred to in Chapter

1, Telenor has communicated that the entire copper access network is to be decommissioned by the end of 2022. In the light of this, Nkom has assessed whether there is a need to make changes to Telenor's obligation to provide access to the copper-based access network.

74. In the Market Decisions, several access obligations relating to the company's copper-based access network are imposed on Telenor, including physical access to access lines and shared access lines in the Marked 3a Decision, and bitstream access in the Marked 3b Decision, cf. Chapter 7.2 of the decisions. A number of other specific obligations are also imposed on Telenor, with the intention of supporting the access obligation, cf. Chapters 7.3 to 7.6 of the Market Decisions. The general provision in the Norwegian Electronic Communications Act regarding access is defined in Section 4-1 of the Act. The first paragraph of the provision reads:

“The Authority may direct a provider with significant market power to meet any reasonable request to enter into or amend an agreement on access to electronic communications networks and services.”

75. On assessing the imposition of access obligations, the interest of the infrastructure owner in having control of its own network must be weighed against other providers' need to have access to facilities that are necessary in order to offer competing services. Imposing obligations that increase competition in the short term should not reduce the competitors' incentives to invest in alternative infrastructure that, in turn, may boost competition in the long-term.

76. Section 4-1 of the Norwegian Electronic Communications Act implements Article 12 of the Access Directive⁷. Article 12 (1) of the Access Directive provides a non-exhaustive list of examples of access obligations which the national regulatory authority must be able to impose on a provider with significant market power.

77. Section 1 (c) states that the regulatory authority must be able to set the requirement:

“...not to withdraw access to facilities already granted.”

78. Like the other directives implemented by the Norwegian Electronic Communications Act, the provisions in the Access Directive are not included word-for-word, but are adapted to Norwegian legislative tradition. For this reason, the examples in Article 12 (1) (a) to (x) of the

⁷ 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 (Access Directive).

Access Directive, including (c) pertaining to “...not to withdraw access to facilities already granted”, have not been explicitly included in the Electronic Communications Act’s access provision. In Nkom’s view, however, there is no doubt that Section 4-1 of the Norwegian Electronic Communications Act grants the authority that the national regulatory authority should hold in accordance with Article 12 (c) of the Access Directive.

79. In this connection, Nkom refers to the following statement in the preparatory remarks to the Norwegian Electronic Communications Act, cf. Chapter 7.6 of Proposition no. 58 (2002-2003) to the Odelsting:

“The Ministry notes that the purpose behind the form of directive in the regulatory package includes allowing the EU member states to implement a regulation within this area that is adapted to each country’s legislative tradition. The chapter concerning access in the bill is not a direct translation of the directive texts. The Ministry has adapted the statutory text to Norwegian legislative tradition. The statutory text has also been adapted to Norwegian market conditions in general. In addition, the Ministry also finds that, within such an abstract and complex area such as this, there are grounds to simplify the wording in the Act, in order to facilitate both the understanding and application of the regulations.”

80. Article 12 (2) of the Access Directive states:

“National regulatory authorities may attach to those obligations conditions covering fairness, reasonableness and timeliness.”

81. For the same reasons as stated in connection with Article 12 (c) of the Access Directive, the wording of Article 12 (2) has not been included in Section 4-1 of the Norwegian Electronic Communications Act. In Nkom’s view, there is also no doubt that the access provision in the Norwegian Electronic Communications Act authorises the right to set the types of requirements referred to in Article 12 (2).

82. Nkom also refers to the judgment from Borgarting Court of Appeal on 12 December 2017. In that case, the Court addressed whether Section 4-1 of the Norwegian Electronic Communications Act provides the statutory authority to set requirements in connection with access agreements. In this connection the Court stated the following (page 25):

“Furthermore, the Court of Appeal finds that, pursuant to its factual content, paragraph 197 of the Market 15 decision from 2010 – “clauses that unfairly curtail the providers’ ability to switch host operator” – falls within what can be regulated in an obligation pursuant to Section 4-1 of the Norwegian Electronic Communications Act. The Court of

Appeal does not find sufficient grounds for Telenor's submission that Article 12 of the Access Directive is to be understood so restrictively that it solely allows for regulation of contractual terms that are so unreasonable that they are actually equivalent to a denial of access."

83. The national regulatory authority's competence to require an operator not to withdraw access to resources to which access has already been granted is furthermore assumed in the Commission's NGA Recommendation⁸ (the Recommendation), cf. Paragraph 39 ff. Paragraph 39 furthermore states that the implementation of changes in existing network architecture and technology should not take place in a manner which entails the lapse of existing obligations for providers with significant market power in the broadband markets, unless there is a migration plan between the regulated provider and the access buyers.

84. Paragraph 39 of the Recommendation states the following:

"Existing SMP obligations in relation to Markets 4 and 5 should continue and should not be undone by changes to the existing network architecture and technology, unless agreement is reached on an appropriate migration path between the SMP operator and operators currently enjoying access to the SMP operator's network. In the absence of such agreement, NRAs should ensure that alternative operators are informed no less than 5 years, where appropriate taking into account national circumstances, before any de-commissioning of points of interconnection such as the local loop exchange. This period may be less than 5 years if fully equivalent access is provided at the point of interconnection."

85. The Recommendation assumes five years as a proportionate transition period, unless there is an agreement between the regulated provider and the access buyers concerning the transition from copper-based to new fixed broadband infrastructure. The Recommendation also allows for a shorter transition period if the regulated provider offers access that is a full substitute for the access that lapses.

86. The Recommendation furthermore emphasises the need for a transparent framework for the migration from copper-based to fibre-based networks. Paragraph 40 of the Recommendation states:

⁸ Commission Recommendation of 20 September 2010 on regulated access to Next Generation Access Networks (NGA) (2010/572/EU)

“NRAs should put in place a transparent framework for the migration from copper to fibre-based networks. NRAs should ensure that the systems and procedures put in place by the SMP operator, including operating support systems, are designed so as to facilitate the switching of alternative providers to NGA-based access products.”

87. The Recommendation also highlights the need for the undertaking that purchases access from the provider with significant market power to receive all the necessary information in timely fashion so that it can adjust its own networks and network extension plans accordingly. Section 41 of the Recommendation states:

“NRAs should use their powers under Article 5 of Directive 2002/21/EC to obtain information from the SMP operator concerning any network modification plans that are likely to affect the competitive conditions in a given market or sub-market. Where the SMP operator envisages to replace part of its existing copper access network with fibre and plans to de-commission currently used points of interconnection, NRAs should under Article 9(1) of Directive 2002/19/EC ensure that undertakings enjoying access to the SMP operator’s network receive all necessary information in timely fashion to adjust their own networks and network extension plans accordingly. The NRAs should define the format and level of detail of such information, and ensure that strict confidentiality of the information disclosed is respected.”

88. The Recommendation was principally issued in the interests of achieving harmonised use of the underlying directives, in this instance the Access Directive, cf. the Framework Directive⁹, and must be taken into consideration by the member states to the greatest possible extent. The consideration of harmonised use of the aforementioned directives within the EEA argues in favour of Nkom assigning significant weight to the Recommendation when applying provisions of the Norwegian Electronic Communications Act that implement the relevant provisions of the Directive.

89. Nkom also refers to our assessment of the consultation comments in Chapter 2.2.1 above, concerning the issue of statutory authority.

90. Nkom hence considers that there is statutory authority for Nkom to impose on Telenor the obligations following from this decision.

⁹Directive 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 (Framework Directive).

3.3 Access obligation concerning the copper-based access network

3.3.1 The need for access to the copper-based access network

91. Telenor's copper-based access network is the only nationwide – or close to nationwide – fixed network in Norway. Access to this network has therefore been a critical input factor for broadband providers who have offered fixed broadband services in competition with Telenor.

92. Access to the copper access network is important for operators in the consumer market, partly because it provides a large, accessible market within Norway and enables effective marketing at national level. The opportunity for a large, accessible market is particularly important in the Norwegian market, which is small in an international perspective. The broadband market is characterised by economies of scale at both the infrastructure and service levels. The lapse of economies of scale arising from national or near national coverage will lead operators that have generally relied on access to Telenor's copper network, and operators that have used access to Telenor's copper network to supplement their own infrastructure in order to ensure coverage, to be weakened as competitors in the market.

93. Access to the nationwide copper access network has also been important for operators serving the business market, and has facilitated the competition for both services and infrastructure. The opportunity to combine the deployment of its own infrastructure for the larger locations with access to the copper access network has contributed to strengthening the degree of infrastructure-based competition in the corporate market, also in the multi-access segment. The lapse of this opportunity might therefore lead to reduced investments and weakened competition in the retail market.

94. Nkom assumes that Telenor mainly will offer its own end users fibre-based broadband and fixed mobile broadband as a replacement for copper-based broadband. Nkom refers to Telenor's quarterly report for Q4 2018, where Telenor in the presentation has included the following wording: "*replacing copper with fibre and fixed wireless solutions*". This presentation was given on 30 January 2019, about one month after the Market decisions had been issued. Similar information has been provided in status meetings between the Ministry of Local Government and Modernisation, Telenor and Nkom.

95. Telenor has communicated that they do not have offers for replacement of copper based services – or plans for such offers – for their own end users that have other offers based on HFC or fibre. Telenor has not communicated either that they have any plans to offer products in the wholesale market that will enable access buyers to provide services to such end

users. No other providers of broadband services than Telenor are subject to access obligations. The coverage for the replacement products that Telenor so far has been required to offer at the wholesale level will be significantly lower than the coverage of the copper access network. The effect of this is that the accessible market is significantly reduced for access buyers if the copper access time horizon is too short and there is no regulated access to fibre networks other than Telenor's.

96. Telenor will, however, continue to have an almost nationwide access network for fixed or mobile broadband services, including FWA services based on the mobile network. Telenor has chosen, however, not to offer fixed mobile broadband to retail customers that are covered by other cable-based broadband offers than copper.

97. Nkom has imposed access to VULA fibre in Market 3a and has notified access obligations for fixed mobile broadband in Market 3b. Nonetheless, both of these products appear as only partial substitutes for wholesale access to the copper network. This is due to the geographical coverage, technical characteristics as well as pricing aspects of the access products. The timing of the availability of these access products against the ability of the access buyers to safeguard their end customers in a manner similar to that of Telenor underpins the need for an extended duration of access obligations.

98. Concerning the impact on competition and on investments by access buyers who use the copper access network as an input factor for their own broadband services, Nkom refers to how the relatively short time horizon for the decommissioning, inadequate information for external access buyers concerning details of the decommissioning plans, and a lack of information about and access to replacement products, have led to uncertainty concerning the possibility of using access to Telenor's access network for provision of broadband services. In Nkom's assessment, this uncertainty has weakened external access buyers' competitiveness compared to Telenor's own retail activity in the transition from copper-based to a new access infrastructure.

99. In Nkom's view, the lack of predictability in relation to access to Telenor's broadband access network has weakened the competitiveness of external access buyers compared with Telenor's own retail operations in the transition from copper-based to new access infrastructure. Nkom points out that external access buyers have not, or only to a limited extent, been able to meet the demand for broadband services by using access in Telenor's access network that replaces copper access. The uncertainty regarding the possibility of having broadband delivered over the copper network has further led some end users to fear that the broadband provider will not be able to carry out the agreed delivery of copper-based broadband. As Nkom sees it, this

also applies to agreements that expire before the time Telenor has set for the closure of the entire copper access network. In order to get security on their own access to broadband, some of these end users will seek to replace their existing copper-based broadband agreement with broadband over other types of access, typically fiber and mobile. Without predictable access to Telenor's access networks, in such cases the access buyer will have limited opportunity to meet the end user's need for broadband, and thus to meet the competition for the customer relationship.

100. The relatively short decommissioning period set by Telenor furthermore entails that external access buyers have limited opportunities to reconsider and make the necessary adjustments in their own operations and possibly in their business model. This includes such aspects as the possibility of assessing whether they should themselves invest in new infrastructure or enter into cooperation, with the aim of ensuring a basis for the continuation and development of their own retail offers. Nkom furthermore assumes that sufficient time to reconsider is important in order to achieve the necessary access to financial resources in order to make such adjustments to the new situation.

101. In the light of the investment horizon for market players within electronic communications, in terms of investments in infrastructure and also investments in customer acquisition, the uncertainty arising from Telenor's decommissioning of the copper network could possibly also lead to uncertainty in relation to the predictability of the regulatory environment in relation to investment in electronic communication networks more generally, if Nkom had not intervened now.

102. Nkom also notes that the execution of the copper decommissioning planned by Telenor may also increase the risk of transferring of market power from the markets for access to fixed broadband infrastructure to the more concentrated market for access to mobile networks (Market 15), where Telenor has already been designated as a provider with significant market power.

103. In Nkom's assessment, the relatively short time schedule for the decommissioning, inadequate information about the details of the decommissioning plans and the lack of information about and access to replacement products, have meant that external access buyers have not had the same opportunity to safeguard their interests as Telenor's retail activity. Nkom furthermore believes that the overall impact of how Telenor has planned the achievement of the decommissioning of the copper access network can lead to permanent or prolonged weakening of competition, which infringes the objective of the Norwegian Electronic Communications Act.

104. On the basis of the aforementioned, Nkom believes that there is a need to ensure predictable framework conditions for access to the copper-based access network. In Nkom's assessment, this is necessary in order to safeguard competition in markets where copper access is used as an input factor for broadband provision to end users.

105. In Nkom's assessment, predictable framework conditions for access to the copper access network are a necessary, but not sufficient, precondition for ensuring competition in the transition from copper-based broadband services to other access networks, such as fibre and mobile. Nkom therefore also assesses which access it is proportionate to impose on Telenor's other access networks.

3.3.2 Design of the access obligation to ensure predictability in a technology shift

106. As presented above, Telenor has given public notification that the entire copper access network will be decommissioned by the end of 2022. In Chapter 3.3.1, Nkom has discussed various impacts of Telenor's implementation of this decommissioning on the competition in retail markets that use copper access as a broadband input factor, and has concluded that there is a need to ensure predictable framework conditions for access to the copper-based access network. On this basis, Nkom believes that there is a need to maintain access to the copper access network for a longer period than assumed in Telenor's decommissioning plans.

107. How this extended access period should be designed requires the balancing of several considerations. Ensuring predictable framework conditions for operators in the Norwegian broadband market who, to a greater or lesser extent, have based their business operations on regulated access to the copper access network in the ongoing technology shift is a key consideration. At the same time, the design must safeguard Telenor's interest in, within a reasonable time, being able to decommission an access platform that, in the company's view, it is not commercially interesting to maintain.

108. In Nkom's assessment, setting an end date for Telenor's obligation to maintain the access opportunities in the copper access network that lies somewhat further ahead in time than the date Telenor has set for the decommissioning of the copper access network, in combination with an opportunity for Telenor to decommission copper accesses at an earlier time in areas where the company offers access to relevant replacement products, will ensure a reasonable balance between these considerations.

109. This design would facilitate that access buyers have more time for reconsideration. In this respect, Nkom refers to the assessments in Chapter 3.3.1 above. The design will also give Telenor predictability for when, at the latest, the copper network can be decommissioned, and

the opportunity to decommission the copper access network more quickly, based on their own conduct. The design thereby gives Telenor itself the opportunity to influence the timing of the decommissioning. This design would furthermore be appropriate to strengthen Telenor's incentive to offer relevant replacement products.

110. In the draft decision of 20 December 2019, Nkom notified that Telenor would be required not to withdraw access that had been granted before Telenor could offer relevant replacement products. According to the draft decision, only offers of relevant replacement products would lead to the discontinuation of the access obligation, and thereby the decommissioning of the copper accesses. The draft decision thus did not include a date by when Telenor's access obligation concerning the copper access network would lapse, at the latest. Nkom believes that the consideration of predictability for all parties concerned advocates that this decision sets a final date when the access obligation concerning the copper network will lapse.

111. Below, Nkom will assess which end date should be set for Telenor's obligation to maintain access to the copper access network, to ensure that the regulation achieves its purpose.

3.3.3 Scope of the access obligation

112. To ensure that the access obligation is appropriate for the purpose, Nkom believes that the access obligation must include Telenor's entire copper-based access network.

113. This entails that the access obligation will include the parts of the access network that are either subject to the three-year notice period, or subject to shorter notice, but have not yet been decommissioned (if such exist). Whether the point loses some or all of the access buyers during the notice period is not decisive for the access right, cf. Nkom's letter of 3 December 2019. Whether the accesses are registered in KAPAKS is not decisive either, but rather whether the accesses must be available according to the regulation.

114. On the other hand, the obligation to maintain copper-based access does not include accesses that have been decommissioned at the date of this decision, in accordance with the regulation.

3.3.4 Duration of the access obligation

115. To ensure that the access obligation concerning the copper network can fulfil its purpose and thereby support the purpose of the regulation, it is vital that access buyers can

achieve predictability of access for a certain period of time. It is therefore necessary that the access obligation, and thereby also the access right, has a certain minimum duration.

116. Predictable access over time will entail that Telenor's external wholesale customers will to a greater degree be able to use copper access to retain existing customers and to have the opportunity to win new customers. In Nkom's assessment, this applies to both the consumer and the business market. In the business market, this might among other things be crucial to retaining and winning new customers who purchase broadband for various different geographical locations (the "multi-access segment"), such as different types of retail chains.

117. The notification obligation imposed on Telenor in the Market Decisions entails that Telenor must give three years' notice of changes to its copper access network in cases where the company is making changes that lead to the lapse of accesses to which access is granted. The starting point for the conditions concerning this notice period is that the copper network is phased out gradually over time and not at the rapid pace assumed in Telenor's decommissioning plan with a definite end-date in 2022.

118. In Chapter 3.2 concerning the regulatory basis, Nkom has referred to the NGA Recommendation. It is stated here that the regulator, in the absence of a migration agreement between the regulated operator and the access buyer, must ensure that access buyers are informed at least five years before existing networks and technology are discontinued. Nkom notes that currently no agreement exists between Telenor and the access buyers concerning migration from the copper access network to infrastructures which replace the copper access network.

119. The three-year notice period prescribed in the Market decisions were based on Telenor's earlier plans to upgrade the copper network, e.g. through vectoring. The notice period was furthermore based on an agreement between Telenor and the access buyers from several years back, and long before Telenor in January 2019 announced its plans to decommission the copper network. Nkom notes that none of these assumptions apply in a situation where the copper network is to be decommissioned.

120. Other EEA countries have primarily set a five-year notice period for the decommissioning of main connections in the copper access network. This applies to, among others, Denmark¹⁰, Greece, Ireland, Portugal, Spain and Sweden. Belgium and the Netherlands

¹⁰ *The five-year notice period applies to individual access lines that are used by the access buyer, and not other lines that are subject to the access obligation.*

have a three-year notice period, but the main connection can nonetheless only be discontinued if the regulated operator has offered replacement products. In Italy, the requirement is that the regulated operator, Telecom Italia, must have 100% NGA coverage in the area, and there must be a 60% take-up rate, as a minimum, among the potential customers in the area.

121. On the basis of the aforementioned, Nkom concludes that five years from the date of this decision is an appropriate end date for Telenor's access obligation to the copper-based access network. In Nkom's assessment, this will ensure a reasonable balancing of various considerations, including the consideration of predictable access to the copper-based access network for access buyers, predictability for Telenor concerning when, at the latest, the copper access network could be decommissioned, the consideration of competition in markets that use access to the copper access network as a broadband input factor, the consideration of facilitating investments from various operators in the market and thereby also the purpose of ensuring users throughout Norway good, affordable and forward-oriented electronic communications services, cf. Section 1-1 of the Norwegian Electronic Communications Act.

122. In Nkom's assessment, a reasonable balancing of affected interests does imply, however, that the access obligation concerning the copper network should not be maintained for longer than necessary. Nkom will therefore make it possible for Telenor to decommission the copper network more quickly in areas where the company offers access to relevant access products that replace access to the copper access network. Nkom refers to Chapter 3.4 below concerning relevant replacement products. Nkom makes further reference to Chapter 3.5 concerning a migration plan.

3.3.5 End user considerations

123. The need to maintain copper-based access for a certain period of time is also important in terms of end users. Imposing a continued access obligation on Telenor concerning the copper-based access network will maintain the disciplinary effect which this has on the pricing of fibre based broadband in the retail market. This price disciplinary effect was one of the assessments included in the basis for Nkom's design of the price regulation of fibre based access in Market 3a. This price disciplinary effect has been weakened by Telenor's announcement of the decommissioning plans for the copper network. This is because retail customers are more sceptical towards entering into an agreement on the provision of copper-based broadband services, among other things due to uncertainty as to whether providers who base their broadband provision on copper networks will be able to deliver the service over time.

The risk of shortlived customer relationships must also be assumed to have made access buyers less active in the marketing of copper based broadband services.

124. In Nkom's view, there is hence a need to take measures to extend the period of access obligations in the copper network to restore the price-disciplinary effect of regulated access to copper-based broadband on fibre-based broadband services.

125. The wide range of applications gained by the copper network over time does not solely include high-volume services. Various low-volume specialised services directed at private users, e.g. security alarms, and at corporate customers/public-sector customers, e.g. security solutions with alternative connections, may be of great significance. It is important to safeguard this consideration, not only for the sake of the specific end users, but also in the interests of security and emergency management in society.

3.3.6 Relation to the notice periods in the Market Decisions

126. The notice period of three years in the Market Decisions for Markets 3a and 3b as from December 2018 is aimed at situations where Telenor makes changes which lead to the lapse of accesses to which access has been granted.

127. Telenor has decided to decommission the entire copper access network, and the company has communicated this to the general public as well as to access buyers. As Telenor is required to maintain the access to the copper access network for up to five years and to prepare a migration plan, Nkom does not see any reason to maintain this obligation with regard to the copper access network. For the sake of good order, Nkom specifies that the notification rules for other types of regulated access will apply as they are described in the Market Decisions.

128. In the Market Decisions, Telenor is subject to a non-discrimination requirement, among other things between their own retail activity and external access buyers. For the sake of good order, Nkom specifies that this decision does not entail any change in the non-discrimination obligation. This means, among other things, that Telenor is still required to provide external access buyers with information about any changes in the opportunity to use the copper access network, and in the same quality as towards their own retail activity.

129. In Nkom's assessment, Telenor should still have the opportunity to decommission accesses based on the company's fault correction policy and due to conditions beyond Telenor's control within the framework set out in the Market Decisions. This decision therefore does not entail any change in this respect. For the sake of good order, Nkom emphasizes that

this decision should not be considered an acceptance that Telenor's practice of the fault correction regime is in line with the requirements under the regulation.

130. The more specific changes to the Market Decisions are set out in Chapter 4 below.

3.3.7 Relation to new market analyses in Market 3a and Market 3b

131. Nkom's market analyses and market decisions related to the designation of a provider with significant market power and the imposition of special obligations under the Norwegian Electronic Communications Act, take place on a cyclical basis and with a limited forward-looking time horizon. Obligations imposed on providers with significant market power must be proportionate in order to achieve the purpose that the regulation seeks to achieve. If a market is absolved, Nkom has the opportunity to impose a proportionate continuation of obligations during a limited transition period.

132. In the course of the five-year period imposed in this decision, Nkom will conduct a new market analysis and make new market decisions in the broadband markets. Nkom will consider such conditions as product definition of the relevant markets, the geographical extent of the markets and whether one or more providers have significant market power in those markets.

133. In situations where retail customers only have access to one physical infrastructure for the provision of broadband services of the quality required by the customer, competition problems are likely to arise. Nkom will take account of this in the next round of market analysis and decisions concerning remedies. Nkom refers to how other regulators in the EEA that have assessed the terms of competition at the local or regional level have often reasoned that three independent infrastructures are necessary in order to facilitate effective competition without the presence of regulated access.

134. However, Nkom cannot yet predict the outcome of the new market analyses.

135. As Nkom has described above, the copper access network is the only nationwide access network. Access to this network has therefore been important for the competition in markets that use this network as an input factor for the provision of broadband to end users, and the network has been subject to access obligations for a number of years. In the aforementioned Nkom has also described how Telenor's announced decommissioning of the copper access network entails a risk of substantially undermining the competition in these markets. Nkom has also described how we cannot see that Telenor's decision to decommission the copper access network as such can be deemed to have the effect that the company no longer has significant market power in Market 3a and Market 3b. In Nkom's assessment, it is therefore vital to competition that Nkom intervenes in the manner stated in this decision.

136. By setting the duration at five years, Nkom will furthermore have the opportunity to undertake new market analyses and market decisions in due time before the access obligation concerning the copper access network will lapse, at the latest. Nkom will then be able to assess which obligations to impose on any provider(s) with significant market power in the relevant markets, as well as which transition arrangements that might be needed. Nkom will thereby be able to ensure that appropriate consideration is made of the competition.

3.4 Relevant replacement products

3.4.1 Introduction

137. Nkom has above concluded that setting the end date for Telenor's access obligations to the copper-based access network 5 years from the date of this decision, is a fair balance of interests concerned. Nkom has further concluded that Telenor can shut down the copper network sooner in areas where the company offers access to relevant access products substituting for access to the copper access network. In this part of the decision, Nkom will consider and impose certain requirements related to this opportunity for Telenor.

3.4.2 Replacement product requirements

138. Experience so far has shown that there is a need to clarify both what requirements which must be fulfilled for a "relevant replacement product", and of the type of process that should be used to determine whether a specific product is a relevant replacement product or not.

139. The assessments of requirements of relevant replacement products must be conducted in relation to both M3a and M3b. These assessments must take account of the different needs of various different segments in the retail market, and the different needs of various different access buyers. Different needs of various different access buyers are driven partly by the different needs of various different end users, but also by other factors.

140. Against this background, Nkom considers the most appropriate approach to determining criteria for relevant replacement products is to require Telenor to draw up a proposal for a comprehensive migration plan, cf. Chapter 3.5, which through discussions in the Broadband Forum, will clarify the extent to which replacement products offered are deemed to

have such a high degree of substitutability with copper-based access products that there is reason to allow Telenor to withdraw access to the copper network. Any such withdrawal of access might occur at different times in various different geographical areas, depending on the coverage of Telenor's replacement products.

141. The migration plan, cf. Chapter 3.5, will clarify under which conditions the access obligation to parts of the copper network will be lifted.

3.4.3 Obligation to notify Nkom in advance of any new replacement products

142. For a certain period, Telenor has tried out fixed mobile broadband as a replacement product for retail customers who have had DSL-based broadband and who have no offers of fibre- or HFC-based broadband from Telenor or other providers. The product entered a commercial phase in spring 2019, and products aimed specifically at the business market were launched in autumn 2019. Telenor has furthermore, from 1 June 2020, offered a wholesale product. Nkom believes that it might distort competition if Telenor is free to launch replacement products to its own retail customers without providing access buyers with information about wholesale access related to such replacement products early enough for the access buyers to be in the retail market with the equivalent products at the same time as Telenor. As a clarification of the existing obligation to give access buyers access to equivalent information, Nkom sees a need to require Telenor to inform both Nkom and access buyers of new replacement products no later than six months before the company offers the products to its own end users. If there are reasonable grounds for Telenor to be in doubt on whether a product being planned for launch should be deemed a replacement product, the company is obliged to clarify this with Nkom.

3.5 Migration plan

143. Prior to Telenor's notification of decommissioning of the copper network, Telenor has not initiated or conducted any dialogue with access buyers about how the transition from copper-based broadband infrastructure to fibre- and mobile-based infrastructure could take place so that access buyers could have the opportunity to safeguard their interests.

144. As referred to in Nkom's clarification letter of 11 November 2019, the information that Telenor has provided to access buyers concerning notification of the decommissioning of

copper accesses is deficient. The information did not fulfil the content requirements set by the market regulation to provide all information that it is relevant and necessary for the access buyer to receive, in order to be able to safeguard their interests on equivalent terms to Telenor's retail arm.

145. In overall terms, this entails that the process set out by Telenor for migration from copper-based broadband infrastructure to fibre- and mobile-based broadband infrastructure to a great extent deviates from the process described in the Recommendation. This applies with regard to the need to offer access to replacement products in Market 3a and Market 3b¹¹ and with respect to equivalent access to information related to migration.

146. Nkom also remarks that the process outlined by Telenor for migration from copper-based broadband infrastructure to fibre- and mobile-based broadband infrastructure also deviates from the procedure outlined by the new framework for regulation of electronic communication services. In this respect, Nkom refers to Article 81 of the Directive establishing the European Electronic Communications Code (EECC, hereinafter referred to as the "Code"), which was published in the Official Journal of the European Union on 17 December 2018.

147. The provision of the Directive, which, like other parts of the Code, has not yet been incorporated into Norwegian law, instructs that a provider with significant market power must notify the national regulatory authority well in advance of any plans to decommission or replace parts of the network with new infrastructure, including infrastructure that is necessary to operate copper networks that are subject to the access obligation. The national regulator must then, among other things, ensure that there is a transparent process for the transition to the new infrastructure and also ensure that alternative products are made available in the new network, and as a minimum of a quality comparable to the access products they replace, when this is necessary in order to protect the competition and the rights of end users.

148. Against this background, and according to the regulatory basis, cf. Chapter 3.2, Nkom finds that it is proportionate to require Telenor to draw up a comprehensive migration plan.

149. To achieve a transparent and non-discriminatory process for migration to new infrastructure, Nkom deems it appropriate for Telenor to present a comprehensive migration plan, concerning which the access buyers will have the opportunity to provide both verbal and written input. This plan should, as a minimum, show how Telenor will ensure that:

¹¹ *The Recommendation uses the market designations M4 and M5, which are generally equivalent to M3a and M3b in the latest market recommendation.*

- all relevant information concerning the process for the decommissioning of copper in various different geographical areas can be communicated at the same time, and with the same content and level of detail, to all copper customers in the relevant area, while also ensuring that it is the access buyers, and not Telenor, who inform their existing copper customers in this respect;
- access buyers have the same opportunities as Telenor's retail activity to continue their customer relationships with existing copper customers, irrespective of which access solution Telenor chooses to offer as a replacement for copper access in various different geographical areas; and
- access buyers have the opportunity to sell and deliver replacement products to their copper customers, based on a new access solution adopted by Telenor for a given area, as from the same dates as Telenor's retail activity.

150. Nkom deems it appropriate to use an industry forum, similar to the Broadband Forum to obtain verbal input on the migration plan. In Nkom's assessment, the use of the industry forum will be appropriate to illustrate the case and to expedite the process of establishing a final, accepted migration plan that can be adopted by Nkom. Due to the lead time, Nkom believes that, here, there is a need for Telenor and the industry forum to work within clear time limits.

151. In the migration plan, to be approved by Nkom, it will be also clarified under which conditions the access obligation to parts of the copper network will cease.

3.6 Proportionality

3.6.1 General remarks concerning proportionality

152. Section 3-4(3) of the Norwegian Electronic Communications Act states that obligations imposed on providers with significant market power must be "*appropriate to promote sustainable competition as well as facilitate national and international development in the market*". The same provision furthermore states that "*The Authority may amend obligations imposed*". The provision entails that requirements concerning special obligations imposed on providers with significant market power must be proportionate.

153. The proportionality requirement is described in further detail in the preparatory remarks to the Electronic Communications Act, cf. Proposition no. 58 (2002-2003) to the Odelsting. Here, it is stated that:

“The obligations imposed shall be proportionate, non-discriminatory, based on objective and fair criteria and publicly available. Proportionate means that obligations imposed regarding access or significant market power with appurtenant conditions are suitable to compensate for a lack of sustainable competition and will help to promote consumer interests and, where possible, contribute to national and international development. The burdens of the remedies imposed are to be proportionate with regard to what they seek to achieve. This also permits the authorities to link the obligations to certain areas of the relevant market, if appropriate.”

154. The proportionality requirement is also further described in the Market Decisions, cf. Chapter 6.2 of the decisions, and primarily entails that measures must be appropriate to achieve the underlying purpose, and should not exceed what is necessary in each case, and that the advantages of the measure must exceed the drawbacks.

155. The proportionality assessment also includes an assessment of whether the relevant measure is appropriate to promote sustainable market competition. On weighing various considerations against each other, consideration of the users is of key importance, cf. page 84 of Proposition no. 58 (2002-2003) to the Odelsting.

156. Below, Nkom will assess the proportionality of the measures set out above.

3.6.2 In brief about the measures

157. In the Market Decisions, several access obligations related to the company’s copper-based access network were imposed on Telenor, including physical access to the local loop and to subloops in the Market 3a Decision and bitstream access in the Market 3b Decision. Telenor is also subject to a number of other special obligations to support the access obligation, among them a non-discrimination requirement and an obligation to notify changes in the existing price structure, cf. Chapters 7.3 to 7.6 of the decisions.

158. In Chapter 3.3.4 above, Nkom has concluded that Telenor should be required to maintain the access obligation concerning the company’s copper network for up to five years as from the date of this decision, while the copper network may be decommissioned sooner if Telenor offers relevant replacement products.

159. In Chapter 3.5, Nkom has also concluded that Telenor should be required to draw up a comprehensive migration plan that will ensure a transparent process with non-discriminatory terms between external access buyers and Telenor’s own retail arm during the shift from copper-based broadband to broadband via fibre and mobile access infrastructure.

160. This decision entails that the access obligation concerning the copper access network could remain for a rather longer period than as set out in the Market Decisions. This assessment of proportionality thus concerns the potential difference in the duration of the access obligation, compared with what is already set out in the market decisions. In addition, Nkom will assess the proportionality of a requirement concerning a migration plan.

3.6.3 Specific assessment of proportionality

161. In the market analysis underlying the Market Decisions, Nkom has identified denial of access as one of the key competition issues in the relevant markets. To ensure that Telenor, as a provider with significant market power, does not exclude competitors from the retail market by denying or limiting the competitors' access at wholesale level, Telenor is on this basis subject to a number of access obligations in the relevant wholesale markets.

162. Nkom has further identified various types of discriminatory behavior between internal operations and external access buyers in the wholesale markets, as relevant competition problems. In this connection, the Market decisions refers to that Telenor may have an incentive to provide its own retail business with information that they do not provide to external wholesale customers, or may refuse to provide information necessary for wholesale customers to be able to offer services in downstream markets. Against this background, Telenor is subject to a requirement of non-discrimination between its own end-user business and external access buyers.

163. Access to Telenor's copper-based access network at local level has been regulated since the current framework for sector-specific ex-ante regulation in the electronic communications sector was introduced under a new Norwegian Electronic Communications Act in 2003, and many of Telenor's competitors have based their retail provision of broadband access on wholesale access in Telenor's copper access network. Nkom's market analysis shows that access buyers in this wholesale market constitute an important competition factor in the retail market.

164. For some providers, the regulated access to Telenor's copper access network constitutes the main basis for activities in the retail market. This applies particularly to providers who have a minimal or no access network of their own. Other providers use the regulated access to Telenor's copper access network as a supplement to their own access network. The access allows these providers to provide services to end users outside the geographical areas covered by their own access network. The access obligation concerning Telenor's copper access network has thus ensured that providers who do not, or only to a limited extent, have

their own access network, have had the opportunity for nationwide provision in the retail market and thereby to ensure effective competition at retail level throughout Norway.

165. As described above, Telenor has publicly announced that it will decommission the entire copper access network by the end of 2022. Telenor has thereby notified the decommissioning of the only nationwide access network, and a network in which Telenor is required to give access to external access buyers, in the course of a relatively short window of time. Telenor has also failed to provide external access buyers with information about, or access to, products that Telenor will offer access buyers as a replacement for the copper accesses that lapse. As Nkom has referred to above, a consequence of this conduct includes that there is great uncertainty concerning access buyers' opportunity to fulfil existing obligations towards end users concerning the delivery of broadband that uses the copper network as an input factor, and concerning access buyers' opportunity to offer new agreements for the provision of broadband. On this basis, Nkom believes that Telenor's implementation of the decommissioning of the copper access network has the nature of refusal to provide access.

166. The design of the access obligation concerning the copper access network that Nkom has arrived at will create predictable framework conditions for operators who are dependent on such access and facilitate that such operators can continue to have national broadband provision. Such operators will thereby still be able to compete effectively with, among others, Telenor's own retail activity.

167. The access obligation will also give access buyers scope to reconsider and thereby assess which measures they can take to maintain or change their business model and their offers in the retail market. The design of the access obligation is thereby appropriate to create a predictable framework for the access obligation for access buyers, and thereby to support the purpose of the access obligation. In Nkom's assessment, predictable framework conditions for access to the nationwide copper access network will also be appropriate to facilitate investments in infrastructure from operators other than Telenor.

168. The design of the access obligation entails that Telenor will have to maintain the access for a longer period than what follows from Telenor's plan for the decommissioning of the copper access network. Nkom acknowledges that this will impose additional costs on Telenor that the company otherwise would not incur. As described above, Nkom considers it vital to ensure predictability concerning the opportunity to use the nationwide copper access network as an input factor for the provision of broadband services in various retail markets. Nkom furthermore believes that Telenor's plan for the implementation of the decommissioning of the copper access network could have protracted long-term adverse consequences for competition.

Against this background, Nkom believes that the design of the access obligation is necessary in order to remedy this situation and support a development towards sustainable competition. This also entails that Nkom cannot see that there are any less intrusive alternatives to the design of the access obligation that we have proposed.

169. Nkom furthermore cannot see that, on the basis of its position as a provider with significant market power, Telenor has any protection-worthy interest in withdrawing regulated access to the copper access network without requirements being made that take account of the interests of Telenor's wholesale customers, whether this is in the form of an adapted transition period or the offer of relevant replacement products. Nkom hereby refers to how Telenor has not itself proposed a process that makes it possible for the access buyers to safeguard their interests on the same terms as Telenor's own retail activity.

170. Nkom furthermore refers to how the design of the access obligation entails that Telenor itself has the opportunity to influence how quickly the copper access network can be decommissioned. On this basis, Nkom believes that the design of the access obligation is no more burdensome for Telenor than is implied by the purpose.

171. Nkom furthermore cannot see that the migration process from copper-based broadband services to fibre- and mobile-based broadband services, as proposed by Telenor, is in accordance with how companies in an equivalent position have handled such processes in other countries. In Nkom's assessment, this underpins that the obligations in this decision are no more restrictive than is implied by the purpose. The process proposed by Telenor is not in accordance either with the process required by the EU via the Code that will be implemented in Norwegian law. In Nkom's assessment, the relevant provisions of the Code emphasise the great weight given to a transparent and non-discriminatory process for the transition from copper-based to new access infrastructure, in order to promote competition in the broadband markets.

172. The design of the access obligation entails that Telenor can decommission the copper network more quickly if relevant replacement products are offered. The access obligation is furthermore designed so that Telenor must draw up a comprehensive migration plan for the transition to infrastructures that replace the copper accesses, and which entails the equal treatment of external access buyers and Telenor's own retail arm.

173. Access to the copper access network alone will not be sufficient for access buyers to be able to compete on an equal footing with Telenor's own retail activity. The requirement of a migration plan entails that the access buyers have the opportunity to become involved in an appropriate way before the migration plan is adopted. In Nkom's assessment, this requirement

will be appropriate to support a transparent and efficient process for migration to new access infrastructures. Nkom thus believes that the requirement is appropriate to support the goals which the regulation is intended to achieve.

174. In Nkom's assessment, an obligation to present a migration plan that does not discriminate between external access buyers and Telenor's own retail arm, and a transparent and efficient process for the preparation and implementation of the plan, cannot in itself be deemed to be particularly burdensome.

175. The opportunity for Telenor to decommission the copper access network more quickly by offering relevant replacement products will ensure that the access buyers have nationwide access to access networks and that the access obligation concerning the copper access network does not remain for longer than required by the purpose. This design will also give Telenor itself the opportunity to influence how quickly the copper access network is to be decommissioned, and it will also be appropriate to strengthen Telenor's incentives to offer such products more quickly or to a larger extent. In Nkom's assessment, this also supports consideration of the measures as suitable to support the purpose of the regulation.

176. On this basis, Nkom concludes that the changed access obligations imposed on Telenor for access to the copper access network are proportionate.

4 Decision

4.1 Market 3a

Nkom hereby imposes an obligation on Telenor to maintain the access to copper-based access networks for up to five years from the entry into force of this decision.

The decision entails the addition of two new sections to Chapter 7.2.17 of the M3a Decision:

“463b. Pursuant to Section 4-1 of the Electronic Communications Act, Nkom imposes an obligation on Telenor to maintain access to copper-based access networks (LLUB and SLU) for a period of up to 5 years from [date of this decision¹²]. Prior to this date, Telenor may

¹² «This decision» *refers to* “Decision to amend the decisions in Markets 3a and 3b – Obligation to maintain access to copper-based access networks”

decommission copper-based accesses if Telenor offers relevant replacement products to the access buyers, in line with the migration plan approved by Nkom, cf. section 463c.”

“463c. Pursuant to Section 4-6(1) no. 5, cf. Section 4-1 and Section 4-7, Nkom imposes an obligation on Telenor to prepare a draft plan for migration from copper-based infrastructure, without undue delay. The plan is to be approved by Nkom, and the process for execution of the plan must be transparent and non-discriminatory.”

The decision furthermore entails the addition of three new sections to Chapter 7.5.7 of the M3a Decision:

“869b. The notification obligation in section 869 will not apply where Telenor has an obligation to maintain access for a period of up to 5 years from [date of this decision¹³], cf. section 463b.”

“871b. The notification obligation in section 871 will not apply where Telenor has an obligation to maintain access for a period of up to 5 years from [date of this decision¹³], cf. section 463b.”

“879b. As authorised by Section 4-6(1) no. 5, cf. Section 4-1 and Section 4-7 of the Norwegian Electronic Communications Act, Nkom requires Telenor to inform access buyers and Nkom of new replacement products for DSL-based broadband no later than six months before the company offers the products to its own end users. If there are reasonable grounds for Telenor to be in doubt on whether a product being planned for launch should be deemed a replacement product, the company is obliged to clarify this with Nkom.”

4.2 Market 3b

Nkom hereby requires Telenor to maintain the access to copper-based access networks for a period of five years from the entry into force of the decision.

The decision entails the addition of two new sections to Chapter 7.2.15 of the M3b Decision:

“298b. Pursuant to Section 4-1 of the Electronic Communications Act, Nkom imposes an obligation on Telenor to maintain access to copper based broadband access for a period of up to 5 years from [date of this decision¹⁴]. Prior to this date, Telenor may decommission copper-

¹³ «This decision» refers to “Decision to amend the decisions in Markets 3a and 3b – Obligation to maintain access to copper-based access networks”

¹⁴ «This decision» refers to “Decision to amend the decisions in Markets 3a and 3b – Obligation to maintain access to copper-based access networks”

based accesses if Telenor offers relevant replacement products to the access buyers, in line with the migration plan approved by Nkom, cf. Section 298c.”

“298c. Pursuant to Section 4-6(1) no. 5, cf. Section 4-1 and Section 4-7, Nkom imposes an obligation on Telenor to prepare a draft plan for migration from copper-based infrastructure, without undue delay. The plan is to be approved by Nkom, and the process for execution of the plan must be transparent and non-discriminatory.”

The Decision furthermore entails the addition of two new sections to Chapter 7.2.15 of the Decision:

“678b. The notification obligation in section 678 will not apply when Telenor has an obligation to maintain access for a period of up to 5 years from [date of this decision¹⁵], cf. Section 298b.”

“680b. The notification obligation in section 680 will not apply when Telenor has an obligation to maintain access for a period of up to 5 years from [date of this decision¹⁵], cf. section 298b.”

“688b. As authorised by Section 4-6(1) no. 5 and Section 4-7 of the Norwegian Electronic Communications Act, Nkom requires Telenor to inform access buyers and Nkom of new replacement products for DSL-based broadband no later than six months before the company offers the products to its own end users. If there are reasonable grounds for Telenor to be in doubt on whether a product being planned for launch should be deemed a replacement product, the company is obliged to clarify this with Nkom.”

5 Entry into force and appeal

177. The Decision enters into force immediately.

178. The Decision may be appealed, cf. Section 11-6 of the Norwegian Electronic Communications Act, and Section 28 of the Norwegian Public Administration Act. The deadline for appealing decisions is three weeks from the date of the decision, cf. Section 29(1) of the Norwegian Public Administration Act. For this decision, the deadline for appeal is set at [date]. Any appeal must be addressed to the Norwegian Ministry of Local Government and

¹⁵ «This decision» refers to “Decision to amend the decisions in Markets 3a and 3b – Obligation to maintain access to copper-based access networks”



Modernisation and sent to the Norwegian Communications Authority (Nkom), cf. Sections 28 and 32 of the Norwegian Public Administration Act. Section 11-8(1) of the Norwegian Electronic Communications Act stipulates that legal proceedings concerning individual decisions laid down pursuant to or in accordance with this Act must be initiated within six months after the decision was made. The deadline for initiating legal proceedings will be interrupted by an appeal of the decision and will not run for the duration of the appeal process, cf. Section 11-8(2) of the Norwegian Electronic Communications Act.

With kind regards,

NN1

Director

NN2

Head of Section