



Decision on designating undertakings with significant market power and imposing specific obligations in the market for access and call origination on public mobile telephone networks

Case 2300455

9 April 2024

Executive summary

Based on an analysis of the market for access and call origination on public mobile telephone networks, pursuant to Section 3-3 of the Electronic Communications Act, the Norwegian Communications Authority (Nkom) again designates Telenor ASA (Telenor) as an undertaking with significant market power in this market.

Nkom has identified a number of actual and potential competition problems within the market for access and call origination on public mobile telephone networks. Denial of access, including behaviour that may be tantamount to denial of access, is the core problem. Delaying tactics, discrimination on price and other terms, as well as excessive pricing, are all examples of behaviour that the dominant operator can use to protect its own retail business from competition. The Electronic Communications Act states that one or more specific obligations, so-called remedies, must be imposed on providers with significant market power, in order to address identified competition problems.

The main objective of the regulation is to facilitate effective infrastructure competition in the form of three competitive networks. The analysis indicates that, although Norway is well on the way to achieving this objective, there is still a need for sector-specific market regulation for a further period. The decision is thus aimed at maintaining remedies that facilitate efficient development, growth and competitiveness for the third network. At the same time, Nkom believes that, during the period, there is also a need to stimulate service competition and innovation at product level to ensure that users throughout the country have access to good quality, affordable and future-oriented mobile services in line with the purpose of the Electronic Communications Act.

Against this backdrop, Nkom orders Telenor to accommodate all reasonable requests for access and call origination on its mobile network. Reasonable requests for national roaming, access for mobile virtual network operators (MVNOs), access for service providers and co-location must be complied with.

In order to make the access obligation effective, Nkom also imposes a number of requirements, including an obligation for non-discrimination between internal and external provision, standard reference offers and public disclosure, accounting separation and price controls. These obligations are designed and will be followed up separately for each access form in the light of the objective of effective competition.

Service provider access entails limited infrastructure investments and thereby limited risk. To stimulate service competition, Nkom believes that there is still need for a basic form of price controls for this access form, and continues the requirement for a positive gross margin for representative retail products. However, the market analysis indicates that it is particularly challenging for access seekers to compete in the business market. To better facilitate competition in different parts of the business market, Nkom is imposing further segmentation of the products that are tested in the business market.

MVNO access entails investments in core networks and greater product innovation opportunities. For this access form, Telenor will follow up the prohibition on price discrimination between internal and external provision by requiring Telenor to devise accounting separation between the network operations and the internal retail operations for its mobile operations in Norway. Nkom also finds it necessary to subject MVNO access to price controls. Nkom imposes a prohibition on subjecting access seekers to margin squeeze. The obligation will be followed up with periodic margin squeeze tests. Furthermore, access prices for MVNO should be at least as attractive as for service providers.

The price controls are supplemented by requirements regarding price structure. Telenor must not only offer a price structure with variable prices, but also accommodate reasonable requests for alternative price structures that are tailored to each individual access seeker's needs and investments. To facilitate

the negotiation of individual agreements with alternative price structures, Nkom is discontinuing the prohibition on discrimination between external parties. The decision also clarifies that the obligation of non-discrimination between internal and external operations shall not prevent such agreements. The purpose of this change is to create more scope for negotiation for both access seekers and Telenor.

In the decision of 14 May 2020, the price controls for national roaming were designed so that it would be beneficial to expand and transfer traffic to an operator's own network during the regulatory period. At the same time, it was signalled that, as a clear starting point, the price controls should be limited to the lifetime of the decision in question. Nkom stands by this view and abolishes the price controls for national roaming.

Effective co-location is vital for network expansion and facilitating sustainable competition. Nkom therefore continues the current obligations relating to both the access obligation itself and the price controls. This entails deadlines for Telenor's processing of requests and half-yearly reporting on the scope of request applications, acceptances and construction contributions, as well as time spent. The obligations concerning cost orientation and the reporting of cost accounts will continue. At the same time, Nkom believes that the goal of cost-effective development of mobile networks and mutual use of co-location to reduce costs makes it relevant to implement principles of reciprocity. During 2024, Nkom will assess detailed principles and aims to make a decision on the introduction of such a system during the year.

This decision has a time horizon of three years. This is shorter than the time frame for market decisions pursuant to the new Electronic Communications Act, which is five years. Expectations of increased market dynamics as a result of the third network's expansion mean that Nkom considers it necessary to conduct a new market analysis earlier than follows from the maximum time frame.

Contents

- 1. Introduction and background 7**
 - 1.1. Legal basis..... 9
 - 1.2. Structure of the document..... 10
- 2. Designation of providers with significant market power 11**
- 3. Regulatory basis for the choice of remedies 11**
- 4. Current specific obligations 12**
- 5. Competition problems..... 13**
 - 5.1. General considerations concerning competition problems within the market for access and call origination on mobile networks 13
 - 5.2. Vertical leveraging..... 14
 - 5.2.1. Outright refusal to deal/denial of access 14
 - 5.2.2. Leveraging by means of pricing 15
 - 5.2.3. Leveraging by means of non-price variables 16
 - 5.3. Summary of competition problems in the market for access and call origination on mobile networks..... 17
- 6. General – choice of remedies..... 17**
 - 6.1. The goal of infrastructure-based competition and the connection with service competition .. 17
 - 6.2. Proportionality 19
- 7. Explanation of the choice of specific obligation..... 20**
 - 7.1. Access 20
 - 7.1.1. General considerations concerning the legal basis 20
 - 7.1.2. New provision in the proposed new Electronic Communications Act on access to construction infrastructure 21
 - 7.1.3. Access for national roaming 22
 - 7.1.4. Access for MVNOs 25
 - 7.1.5. Access for service providers 26
 - 7.1.6. Access to co-location 28
 - 7.1.7. Other forms of access..... 35
 - 7.1.8. More information about the access obligation..... 35
 - 7.1.9. Special obligations relating to access 50
 - 7.2. Non-discrimination 54
 - 7.2.1. General considerations concerning the legal basis 54
 - 7.2.2. Assessment of the need for a non-discrimination obligation 55

7.2.3.	Further considerations regarding the content of the non-discrimination obligation between internal and external provision	57
7.2.4.	Proportionality	59
7.2.5.	Special obligations relating to non-discrimination between internal and external provision	59
7.3.	Publication and reference offer	60
7.3.1.	General considerations concerning the legal basis	60
7.3.2.	Assessment of the need for transparency obligations.....	61
7.3.3.	General requirements concerning reference offers	61
7.3.4.	Publication of reference offers.....	62
7.3.5.	Submission of reference offers and individual concluded agreements.....	62
7.3.6.	Changes to reference offers.....	63
7.3.7.	Proportionality	63
7.3.8.	Special obligations relating to publication and reference offers	63
7.4.	Accounting separation	65
7.4.1.	General considerations concerning the legal basis.....	65
7.4.2.	Assessment of the need to impose accounting separation for national roaming	65
7.4.3.	Assessment of the need to impose accounting separation for MVNO.....	66
7.4.4.	Assessment of the need to impose accounting separation for service providers	66
7.4.5.	Further considerations concerning accounting separation for national roaming and MVNO	66
7.4.6.	Proportionality	68
7.4.7.	Specific obligations related to accounting separation	68
7.5.	Price and accounting controls	71
7.5.1.	Assessment of the need for price controls concerning access to national roaming, MVNO access and service provider access	71
7.5.2.	Selection of method of price control concerning access to national roaming, MVNO access and service provider access	73
7.5.3.	Differentiated margin squeeze regulation	74
7.5.4.	Requirements regarding relative price levels between different forms of access	75
7.5.5.	Full margin squeeze tests for MVNO access	76
7.5.6.	Further considerations concerning the gross margin test for service provider access ...	77
7.5.7.	Further considerations regarding the follow-up of price controls.....	79
7.5.8.	Requirements regarding price structure	82
7.5.9.	Price for establishment of access	85
7.5.10.	Price controls for co-location	86
7.5.11.	Assessment of proportionality concerning obligations relating to price and accounting controls	90

7.5.12. Specific obligations related to price controls and cost accounting.....	91
7.6. Assumed consequences of the use of remedies	93
7.7. Overall assessment of proportionality	95
7.8. The use of remedies and sanctions in accordance with the Electronic Communications Act and changes in the use of remedies in the decision	97
8. Relationship to the current decision	98
9. The effective date of the decision, the deadline for appeal, etc.	98

Annex 1: Analysis of the market for access and call origination on public mobile telephone networks

Annex 2: Principles for margin squeeze tests in Market 15

Annex 3: Results from the consultation on Nkoms notification of decision in the market for access and call origination on public mobile telephone networks

Annex 4: Margin squeeze model (Excel)

Annex 5: Margin squeeze model manual

Annex 6: Margin squeeze model data request

Annex 7: Margin squeeze model data request (Excel)

Annex 8: Margin squeeze model responses to feedback

Annex 9: Comments from ESA

1. Introduction and background

1. Pursuant to Sections 3-2 and 3-31 of Act No. 83 of 4 July 2003 on electronic communications (the Electronic Communications Act), the Norwegian Communications Authority (Nkom) is required to define and analyse relevant product and service markets and geographical markets in accordance with guidelines and recommendations established by the EFTA Surveillance Authority (ESA) under the Framework Directive for Electronic Communication Services.

2. On 16 November 2022, ESA established guidelines for market analyses and the assessment of significant market power² (hereafter referred to as 'the Guidelines'), which were followed by a recommendation concerning relevant markets on 11 March 2016³. The Commission published an updated recommendation on relevant markets on 18 December 2020⁴. Nkom uses the recommendation as a basis for the analysis, and it is hereafter referred to as the Recommendation.

3. Pursuant to Section 3-4⁵ of the Electronic Communications Act, at least one of the obligations provided for in Chapter 4⁶ of the Electronic Communications Act must be imposed on providers which, following a market analysis, are considered to have significant market power. Such obligations will henceforth be known as specific obligations. Specific obligations are imposed after a proportionality assessment based on actual and potential competition problems in the relevant market.

4. On four previous occasions, Nkom has designated Telenor ASA (Telenor) as a provider with significant market power in the wholesale market for access and call origination on public mobile telephone networks (hereinafter referred to as 'the market for access and call origination on mobile networks'). This market corresponds to Market 15 in the EFTA Surveillance Authority's recommendation from 2004. Based on Telenor's status as a provider with significant market power, Nkom has imposed specific obligations on the company in decisions dated 23 January 2006, 5 August 2010, 1 July 2016 and 14 May 2020 respectively.

5. Nkom conducted a consultation on an analysis of the mobile network access and origination market from 22 March to 14 May 2023. The market analysis formed the basis for a conclusion that the relevant market still qualifies for ex-ante regulation, and further that Telenor has significant market power. Nkom received responses from Elmera Group/Fjordkraft mobil (Fjordkraft), the Norwegian Consumer Council, Happybytes AS (Happybytes), Ice Communications Norway AS (Ice), ⁷Telavox AB (Telavox), Telenor ASA (Telenor) and Telia Norway AS (Telia). The consultation input was summarized in Appendix 3 to the notification of decision and incorporated into updated market analysis together with new electronic communications statistics for the first half of 2023.

6. Subsequently, Nkom announced a draft decision to designate a provider with significant market power and to impose specific obligations on 28 September 2023. A hearing on the draft decision ended on November 10, 2023. Nkom received responses from Elmera Group/Fjordkraft, Chili

¹ Proposed new Electronic Communications Act, Sections 6-2 and 6-3

² EFTA Surveillance Authority Guidelines of 16 November 2022.

³ EFTA Surveillance Authority Recommendation of 11 May 2016 with the Commission's Explanatory Note.

⁴ Commission Recommendation (EU) 2020/2245 of 18 December 2020 on relevant product and service markets within the electronic communications sector susceptible to ex ante regulation in accordance with Directive (EU) 2018/1972 of the European Parliament and of the Council establishing the European Electronic Communications Code

⁵ Proposed new Electronic Communications Act, Section 6-4

⁶ Proposed new Electronic Communications Act, Chapter 7

⁷ From 1 February 2024, the telecommunications business in the Lyse Group was gathered under the name Lyse Tele AS. Altibox, Ice and Nicemobil remain as brands under Lyse Tele AS. In the analysis, Ice is used as the provider name for the company's mobile network and mobile retail offerings. Lyse is used in the discussion of the Group.

mobil, Ice, Telavox, Telenor and Telia. Aller Media/PlussMobil, Ice and Telenor also submitted comments to the responses. The consultation responses are summarized in Appendix 3 to the decision and were incorporated into the draft decision.

7. The draft decision (English version) was notified to ESA on 1 October. March 2024, cf. Section 9-3 of the Electronic Communications Act, Article 7 of the Framework Directive and the Authority's Article 7 Recommendation. ESA submitted its comments on the notification on 26 September. March 2024, see Annex 9. The Authority urged Nkom to:

- Monitor developments in the market closely with a view to lifting regulation as soon as the appropriate conditions are met.
- Monitor the development of dedicated mobile broadband subscriptions and consider whether there it is appropriate to include them in the relevant retail market.
- Ensure robustness in the quantifications and in the quantitative assessments.
- Ensure that phase-in of the reciprocal pricing principle for co-location does not introduce wrong incentives and generate undesired consequences.

8. Nkom has taken note of ESA's comments. Nkom will follow the market closely in the future with a view to lifting regulation, as also indicated in the decision. ESA also recognizes in its comments that Nkom has already taken due account of balancing its regulatory obligations against investment incentives. In this context, the ESA also provides support for a relatively short regulatory period specified in the decision to be three years.

9. When it comes to definition of the retail market for mobile broadband, Nkom has followed a consistent practice over time by defining traditional telephony connected services and dedicated mobile broadband as two separate end-user markets. The reason for not including mobile broadband in the market for bundled mobile telephony services is the absence of sufficient substitutability from bundled mobile telephony services to mobile broadband, mainly on the demand side, but also on the supply side. Nkom maintains that this is a correct market delimitation that is also consistent with previous practice. However, Nkom will closely monitor market developments for mobile broadband, as encouraged, by ESA, in view of any changes. In any case, Nkom understands that the conclusion to lift regulation of dedicated mobile broadband, partly because mobile broadband constitutes a very limited segment, is supported.

10. Nkom agrees with ESA that it is important to ensure robustness in the quantification of data to be included in margin squeeze tests. When Analysys Mason, on behalf of Nkom, updated the estimates for fixed and variable retail costs in the margin squeeze test, it was important that the data were as good as possible. It was therefore decided to obtain cost data from a wide range of providers. A data collection form requesting costs split according to a specific structure, was sent to Telenor and 11 alternative providers. Alternative providers have limited resources, and the number of years of data requested was considered proportionate given the potential effort required to deliver the requested data. Nkom received data from Telenor and four alternative providers. However, the cost data received were of varying degree of detail and quality. Nkom therefore does not expect that a more extensive data request for a longer period of time to the same providers would have provided a more robust data basis.

11. In addition to this method, Analysys Mason collected and analyzed publicly available accounting data from certain particularly relevant providers, including Chilimobil. In analyzing Chilimobil's accounting data, it was chosen to emphasize the cost data for the years from 2018 through 2022. In Nkom's view, it was most relevant to use the latest available cost data to estimate the costs of a representative provider today and in the future. Older cost data were thus less relevant. Another reason why Nkom chose to emphasize data from this period was that before 2018, Chilimobil had a

different business model where the offer of prepaid subscriptions was more prominent. Figures from Nkom's statistics show that Chilimobil had a significantly higher proportion of prepaid subscriptions in the years before 2018 than in the following years. The number of prepaid subscriptions in Norway has fallen over many years and constitutes an increasingly smaller share of the total number of mobile subscriptions. In the latest margin squeeze tests conducted by Nkom, no prepaid subscriptions have been considered to be representative products, and no such subscriptions have therefore been included in the tests. Based on this, Chilimobil's cost data prior to 2018 was considered to be less relevant for estimating costs for a representative provider today and beyond.

12. Nkom would like to emphasize that it is not unexpected that the size of fixed costs varies depending on which provider is considered, since these providers differ greatly in terms of the scope of their operations. This includes the markets they operate in, the segments they target, the subscriber types they offer, and their presence in the market.

13. In summary, Nkom believes that a thorough job has been done in collecting and analyzing available cost data and that the fixed and variable costs estimated by Analysys Mason on behalf of Nkom are robust.

14. With regard to co-location, the Authority comments that it is desirable to reduce duplication of infrastructure and encourage co-location, provided that this does not hinder infrastructure-based competition. Furthermore, the Authority suggests that infrastructure competition in this segment should not be developed solely at the expense of one provider and that it makes sense to introduce mechanisms reflecting market dynamics in the absence of regulation. Principles of reciprocal pricing point in this direction. However, the Authority notes that such principles may also have unintended consequences, for example for operators who purchase co-location without being entitled to the protection afforded by market 15 regulation, and asks Nkom to pay particular attention to this and ensure a broad consultation on the principles. Nkom points out that chapter 7.5.10.4 of the decision provides for consultation among affected players, and Nkom will ensure that buyers of co-location who are not within the relevant market are also made aware of the consultation and given the opportunity to express their views. Nkom shall notify the decision to ESA before such principles can enter into force.

15. Nkom maintains the conclusion in the market analysis that the relevant market still qualifies for ex-ante regulation and that Telenor has significant market power. This decision has a time horizon of three years.

16. Based on the above, Nkom hereby reaches a decision which concludes that the market still qualifies for sector-specific ex ante regulation, designates Telenor as a provider with significant market power, and imposes new obligations and withdraws current obligations.

1.1. Legal basis

17. The regulatory framework for electronic communications is based on five Directives adopted by the European Union (EU).⁸ These Directives have been implemented in Norwegian Law by Act no. 83 of 4 July 2003 relating to electronic communications (Electronic Communications Act) and associated

⁸ Directive 2002/21/EC on a common regulatory framework for electronic communications networks and services (Framework Directive); Directive 2002/20/EC on the authorisation of electronic communications networks and services (Authorisation Directive); Directive 2002/19/EC on access to, and interconnection of, electronic communications networks and associated facilities (Access Directive); Directive 2002/22/EC on universal service and users' rights relating to electronic communications networks and services (Universal Service Directive); Directive 2002/58/EC concerning the processing of personal data and the protection of privacy in the electronic communications sector (Directive on privacy and electronic communications).

regulations, including the Regulations of 16 February 2004 on electronic communications networks and services (Ecom Regulations).

18. In 2018, the EU adopted a Directive revising the common European framework for electronic communications. The Directive replaced four of the five original Directives with a single new directive⁹. The Directive will hereinafter be referred to as the 'Electronic Communications Directive'.

19. The Electronic Communications Directive was incorporated into the EEA Agreement on 24 September 2021, and has resulted in a need for amendments to the Electronic Communications Act and associated regulations. Proposals for a new Electronic Communications Act and regulations were circulated for comment on 2 July 2022¹⁰. The Ministry of Digitalisation and Public Governance is currently working on a draft text of the bill for consideration by The Storting. The decision will hereinafter be based on the current Electronic Communications Act and associated regulations. Initial references to statutory and regulatory provisions (primarily chapter 3) will contain references to updated provisions in the proposed new Electronic Communications Act and associated regulations.

20. According to the regulatory framework, the obligations for providers with significant market power are determined individually on the basis of a market analysis and with a limited forward-looking time horizon.¹¹ Particular attention must be paid to the expected pro-competitive effect of the relevant remedies.

1.2. Structure of the document

21. This decision comprises a main document with an assessment of the need and grounds for imposing specific obligations. The decision has nine annexes. Annex 1 contains an analysis of the market for access and call origination on mobile networks, including a three-criteria test. Annex 2 contains principles for margin squeeze tests in Market 15. Annex 3 contains a summary and assessment of responses to the consultation. Annex 4 contains the margin squeeze model (Excel). Annex 5 contains model documentation for the margin squeeze model. Annexes 6 and 7 contain a questionnaire for data collection for the margin squeeze model. Annex 8 contains feedback to comments received on the margin squeeze model. Annex 9 contains ESAs comments to the notification.

22. In chapter 2, Nkom again designates Telenor as a provider with significant market power. The designation is made on the basis of the market analysis in Annex 1. Chapter 3 provides a brief overview of the regulatory starting point for the choice of remedies, while chapter 4 provides an overview of the current specific obligations for Telenor in the market for access and call origination on mobile networks. Chapter 5 gives a description and an overview of potential competition problems in the relevant market. General principles for the use of remedies are discussed in chapter 6, including possibilities for duplicating infrastructure and the proportionality principle. Based on the preceding chapters and the market analysis in the Annex, Nkom discusses the choice of specific obligations in chapter 7. Sections 7.1.9, 7.2.5, 7.3.8, 7.4.7 and 7.5.12 impose specific obligations. The relationship to the current decision is described in more detail in chapter 8.

⁹ Directive (EU) 2018/1972 of the European Parliament and of the Council of 11 December 2018 establishing the European Electronic Communications Code.

¹⁰ The Ministry of Local Government and Regional Development's consultation on a new Electronic Communications Act, new Electronic Communications Regulations and amendments to the Numbering Regulations: [Consultation - Proposal for a new Electronic Communications Act, new Electronic Communications Regulations and amendments to the Numbering Regulations - regjeringen.no](https://www.regjeringen.no)

¹¹ See the time horizon in the Commission guidelines, section 14. Reference is made to chapter 1 of the market analysis for further details of ESA's and the Commission's guidelines for market analyses.

2. Designation of providers with significant market power

23. Based on the market analysis (Annex 1), pursuant to Section 3-3¹² of the Electronic Communications Act, Nkom again designates Telenor ASA as a provider with significant market power in the market for access and call origination on public mobile telephone networks. For further justification, see the analysis in Annex 1.

3. Regulatory basis for the choice of remedies

24. Pursuant to Section 3-4, paragraph one¹³, cf. Section 3-1, paragraph one¹⁴, of the Electronic Communications Act, one or more specific obligations in accordance with Section 4-1¹⁵ and Sections 4-4¹⁶ to 4-10¹⁷ will be imposed on an undertaking with significant market power, alone or together with others. Relevant obligations for the market for access and call origination on mobile networks are:

- Access obligations, cf. Electronic Communications Act, Sections 4-1¹⁸, 4-4¹⁹ and 4-5²⁰
- Obligation of non-discrimination, cf. Electronic Communications Act, Section 4-7²¹
- Obligation to publish standard reference offers, cf. Electronic Communications Act, Section 4-6²²
- Obligation of transparency, cf. the Electronic Communications Act, Sections 4-6²³ and 4-8²⁴
- Obligation of accounting separation, cf. Electronic Communications Act, Section 4-8
- Price controls and obligations concerning cost accounting, cf. Electronic Communications Act, Section 4-9²⁵

25. In special cases, obligations may also be imposed beyond what follows from these provisions. In such cases, the consultation procedure pursuant to Section 9-3²⁶ of the Electronic Communications Act is to be followed.

26. In accordance with the general principles of administrative law and the proportionality principle in EU/EEA law, the obligations Nkom imposes on undertakings with significant market power

¹² Proposed new Electronic Communications Act, Section 6-3

¹³ Proposed new Electronic Communications Act Section 6-4, paragraph one

¹⁴ Proposed new Electronic Communications Act Section 6-1, paragraph one

¹⁵ Proposed new Electronic Communications Act, Section 7-2

¹⁶ Proposed new Electronic Communications Act, Sections 10-2, 10-3 and 10-5

¹⁷ Proposed new Electronic Communications Act, Section 7-11, paragraphs one and two

¹⁸ Proposed new Electronic Communications Act, Section 6-4

¹⁹ Proposed new Electronic Communications Act, Sections 10-2, 10-3 and 10-5

²⁰ Proposed new Electronic Communications Act, Sections 12-6 and 15-4

²¹ Proposed new Electronic Communications Act, Section 7-5

²² Proposed new Electronic Communications Act, Section 7-4

²³ Proposed new Electronic Communications Act, Section 7-4

²⁴ Proposed new Electronic Communications Act, Sections 7-6 and 7-9

²⁵ Proposed new Electronic Communications Act, Section 7-7

²⁶ Proposed new Electronic Communications Act, Section 14-3

shall be appropriate to, and not extend further than is necessary for, furthering the purpose of the Electronic Communications Act. The basic purposes are stated in Section 1-1²⁷, which reads:

“The purpose of the Act is to secure good, reasonably priced and future-oriented electronic communications services for the users throughout the country through efficient use of society’s resources by facilitating sustainable competition, as well as fostering industrial development and innovation.”

27. In addition to the general purpose provision in Section 1-1, a special purpose provision is set out in Section 3-4, paragraph three²⁸. The provision stipulates specific, relevant considerations for imposing specific remedies:

“Obligations pursuant to the first and second paragraphs that are imposed in the individual case shall be appropriate to promote sustainable competition as well as facilitate national and international development in the market. The Authority may amend obligations imposed.”

4. Current specific obligations

28. Telenor was designated as a provider with significant market power in the market for access and call origination on mobile networks on 14 May 2020. Under the current decision, the following obligations are imposed on Telenor:

- **Access.** Pursuant to Section 4-1, paragraph one and Section 4-4, paragraph four of the Electronic Communications Act, cf. paragraph six, Telenor is ordered to accommodate all reasonable requests for access in the form of national roaming, MVNO access, service provider access and co-location. All agreements on access and call origination on Telenor’s mobile network shall be negotiated without undue delay. If access is denied, Telenor must give the requester a documented and justified refusal of the request, cf. Section 4-1, paragraph three, and Section 4-4, paragraph six of the Electronic Communications Act. The grounds for refusal must contain all details that are necessary to assess the basis for refusal, such as the reason why access has been denied, together with the necessary documentation.
- **Non-discrimination.** Pursuant to Section 4-7, paragraphs one and two of the Electronic Communications Act, an obligation was imposed on Telenor not to discriminate with regard to price or any other terms of access to national roaming, MVNO access, service provider access and co-location. The obligation applies between external operations based on the same access form, and also between own and external operations.
- **Publishing and reference offers.** Pursuant to Section 4-6 of the Electronic Communications Act, an obligation was imposed on Telenor to draw up reference offers for national roaming, service provider access and co-location. The reference offers are to be published on Telenor’s website. The obligation to publish does not extend to information on national roaming prices, MVNO access and service provider access, which the company only needs to make available to providers that contact Telenor. Telenor is also ordered to inform Nkom of any amendments to the reference offers, including new prices and discounts. Pursuant to Section 10-3²⁹ of the Electronic Communications Act, a further obligation is imposed on Telenor to submit a copy of all finalised individual agreements concerning access and call origination on mobile networks, with the exception of agreements on co-location, no later than within two weeks after signing.

²⁷ Proposed new Electronic Communications Act, Section 1-1

²⁸ Proposal for a new Electronic Communications Act Section 6-4, paragraph one

²⁹ Proposed new Electronic Communications Act, Section 15-2

Telenor shall also be obliged to notify Nkom of any changes to such agreements. Price terms that Telenor offers upon a request for national roaming must be submitted to Nkom without undue delay and no later than two weeks after the offer has been given.

- **Accounting separation.** Pursuant to Section 4-8 of the Electronic Communications Act, an obligation was imposed on Telenor to devise an accounting separation between the network operations and the internal retail business for its mobile operations in Norway. The accounting separation shall form a basis for monitoring compliance with the prohibition on price discrimination against MVNO providers. Accounting separation must also be reported for national roaming.

The accounts and documentation that the obligation of non-discrimination has been met shall be sent to Nkom each year by 1 October and 1 April for the first and second six-month periods, respectively. In addition, yearly reports based on updated distribution formulas must be submitted by 1 July each year. A description of the system for accounting separation, including an overview of cost categories and the allocation key that is used, must be published.

- **Price and accounting controls.** Pursuant to Section 4-9, paragraph two of the Electronic Communications Act, Telenor is ordered to offer service provider access, MVNO access and access to national roaming at prices which entail that the access seeker is not subject to margin squeeze. Telenor must make a reference offer based on traffic-dependent, variable prices for all forms of access. For national roaming, Telenor must offer access based on traffic-dependent linear prices per service/subscription. Telenor must also offer alternative price structures, and bulk prices may be an alternative price structure. The establishment of such access agreements must be offered at reasonable prices. With regard to co-location, Telenor is required to have cost-oriented prices. Cost accounts pursuant to Section 4-9 of the Electronic Communications Act must be submitted.

29. The decision was appealed by eRate, Fjordkraft, Ice and Telenor on 11 June 2020. After considering appeals against the decision, Nkom amended and clarified certain aspects relating to the requirements concerning bulk prices and the obligation of non-discrimination. The amendments are set out in a decision of 1 September 2020. The introduction of the requirement for bulk prices has been deferred until a decision has been reached regarding the appeal against the amendment decision. Other obligations apply.

5. Competition problems

5.1. General considerations concerning competition problems within the market for access and call origination on mobile networks

30. Nkom's market analysis (Annex 1) concluded that there is no sustainable competition in the market for access and call origination on mobile networks in Norway. Telenor can, to a large degree, act independently of competitors, customers and consumers, and has therefore been designated as an operator with significant market power.

31. A provider with significant market power will be able to engage in behaviour which has the purpose, or effect, of limiting competition in the market. This behaviour may involve driving competitors out of the market, preventing new operators from establishing themselves or exploiting end-users. This kind of anti-competitive behaviour is referred to here as 'competition problems'.

32. Specific obligations imposed on providers with significant market power must be suited to remedy actual and/or potential competition problems in the relevant market. The imposition of specific obligations is not conditional on the abuse of market power actually having occurred. It is sufficient that a competition problem might potentially arise under given conditions.

33. The terms for Telenor's offer of access and call origination on mobile networks have thus far been subject to regulation, including detail price and accounting regulations. The assessment of competition problems in this decision includes behaviour that could have occurred if the market was not regulated. In this assessment, it is useful to examine what incentives the market structure would give an operator with significant market power in the absence of regulation. Nkom cannot predict every potential competition problem that may arise in the absence of regulation. In order to capture as many potential situations as possible that can arise, the potential competition problems will be described in general terms.

5.2. Vertical leveraging

34. Nkom believes that the most important competition problems in the market for access and call origination on mobile networks in which Telenor is vertically integrated are primarily related to vertical leveraging and market power. Vertical leveraging³⁰ defines a situation where a vertically integrated provider with significant market power in the wholesale market seeks to transfer market power from the wholesale market to a related retail market by shutting out or working against competitors for the benefit of their own retail business.

35. With regard to the choice of remedies, it is helpful to distinguish between three types of vertical leveraging:

- Denial of access
- Leveraging by means of pricing
- Leveraging by means of non-price variables

5.2.1. Outright refusal to deal/denial of access

36. An operator with significant market power in the wholesale market might attempt to leverage market power by denying access for operators that offer competing services in the related retail markets. This encompasses both situations where the network operator refuses to deal with access seekers, and instances where access is sold on unreasonable terms, so that the access seeker does not have a real possibility of supplying competitive products in the retail markets.

37. Denial of access is the core problem in the market for access and call origination on mobile networks. Such behaviour can prevent new operators from becoming established and, in the worst case, may force established operators out of the market.

38. Nkom believes that, in the absence of ex ante regulation, Telenor will have the incentive and opportunity to deny other providers access and call origination services, or to obstruct access. Nkom believes that Telenor has incentives to exploit its significant market power to achieve and exploit competitive advantages in the retail markets, rather than selling wholesale access. This is associated with Telenor achieving a significantly higher proportion of its revenues from sales to end users than wholesale sales. Telenor has an extensive presence in different retail markets, which entails that providing access to mobile networks for external operators will, in most instances, entail direct

³⁰ Vertical leveraging may be defined as "...any dominant firm's practice that denies proper access to an essential input it produces to some users of this input, with the intent of extending monopoly power from one segment of the market (the bottleneck segment) to the other (the potentially competitive segment)" (Rey/Tirole 1997).

competition with its own retail business. By cutting off or restricting competitors from accessing a necessary input factor, Telenor will, to a certain extent, be able to protect its own retail business from competition. This indicates that Telenor has little self-interest in outsourcing downstream activities.

39. Access to co-location of equipment in masts, cabins, etc. gives other network owners the opportunity to accelerate development at the lowest possible cost. In recent years, structural changes have taken place as regards this access product, as Telenor, Telia and Lyse/Ice have all divested their tower companies which manage the passive infrastructure. Co-location has thus gained a stronger commercial focus. However, the Norwegian tower companies are still owned by telecom operators, so it must be assumed that there is still an incentive to use the tower companies in order to gain a competitive advantage in the retail market. For example, prioritising internal capacity expansions and dragging out or rejecting requests for co-location from a network developer that constitutes a competitor in the same retail markets could, for example, effectively prevent competition in the retail market.

40. In the absence of sector-specific access obligations, Nkom believes that denial of access will represent a potential competition problem in the next three years.

5.2.2. Leveraging by means of pricing

41. Leveraging of market power by means of pricing encompasses behaviour aimed at increasing competitors' costs and/or limiting competitors' sales in the retail markets. This can be done through predatory pricing in the retail markets, excessive pricing in the wholesale market, price discrimination between external and internal retail businesses, and possibly between external wholesale customers, or by subjecting competitors to margin squeeze. The effect of this form of leveraging can, in practice, be regarded as equivalent to denial of access.

42. A vertically integrated undertaking with significant market power in the wholesale market will have an incentive and opportunity to discriminate on price between internal and external operations. By doing so, the costs for competitors to the provider with significant market power could be higher than the costs for own retail activities, and thereby subject the competitors to a competitive disadvantage in the retail markets. This may result in reduced sales or margin squeeze. Margin squeeze is when the difference between the access charge (in the wholesale market) and the price level in the retail market is so small that the costs for competitors are not covered, leaving them at risk of being squeezed out of the market. The price level differs between the retail markets and will be partly dependent on the end-users' willingness to pay. Margin squeeze tests for various different retail markets can therefore give different results.

43. As from February 2017, Nkom has conducted several margin squeeze tests on a selection of Telenor's products/segments. During the period 2017 to 2019, on four occasions, Nkom ordered the correction of Telenor's access prices as a consequence of the margin squeeze tests, and on one occasion Nkom subsequently took a correction decision. In recent years, Telenor has, on its own initiative, revised its access prices in order to pass Nkom's margin squeeze tests.

44. The establishment of separate tower companies with the independent purpose of commercial operation must be expected to have resulted not only in a stronger focus and an incentive to offer placement to other operators, but also an incentive to increase prices in order to maximise earnings. According to other network owners, Telenor essentially has a monopoly on placement in many areas where the landowner or municipality does not allow others to erect new masts close to existing infrastructure. In the absence of regulation, Telenor would thus have an incentive to raise prices where placement is absolutely necessary for other operators.

45. Providers with significant market power may also discriminate on price between different wholesale customers, in order to prevent competition from operators who pose a threat to their own retail business.

46. Price discrimination may also be expressed in terms of the price structure. A vertically integrated operator that is not itself bound by an internal access agreement will have incentives to offer price structures externally that prevent and/or limit competitors' opportunities to compete in the retail market. In this way, price structures can create different terms of competition between internal and external activities.

47. Nkom finds that price discrimination is a potential and actual serious competition problem in the relevant market.

5.2.3. Leveraging by means of non-price variables

48. The most relevant forms of leveraging by means of non-price variables are described below.

Discriminatory use or withholding of information

49. The competition problem relates to a practice whereby a provider with significant market power gives its own operations in the retail market information that it does not give to its external wholesale customers, thereby achieving a competitive advantage for its own retail business. For example, the dominant operator may fail to provide information about the wholesale offer, or provide information in a way that makes the wholesale offer difficult to fully understand, and thereby difficult to accept, and/or makes it difficult to offer the end-user service.

50. During the current regulatory period, Nkom has imposed a fine on Telenor for breaching the obligation to provide equal information to both its own and external operations. In the case in question, the external access seeker was not given access to information about Telenor's mobile network in a format that was requested in a public competitive tendering procedure. The information was nevertheless obtained for Telenor's own operations. According to Telenor, this differential treatment occurred as a result of a deviation from established routines.

51. Discrimination or withholding of information may result in a competitive disadvantage for access seekers in the form of, inter alia, lower quality of the retail product, higher costs and delays compared with the dominant operator.

Delaying tactics

52. A dominant operator might have an incentive to use different forms of delaying tactics to slow down access, for example by prolonging negotiations or having unreasonably long delivery times.

53. In the absence of effective regulation, delaying tactics may constitute a competition problem in the years ahead. Lengthy negotiations will benefit, among others, Telenor when introducing new services and could provide the company with a 'first mover advantage'.

Undue requirements

54. This category covers all contract terms that require special action by the access seeker, which is not necessary in order to sell the wholesale product, but which increases the competitor's costs or limits sales. Such undue requirements can be envisaged in connection with all the relevant types of access. Providers requiring access might, for example, have to accept unnecessarily large guarantee provision, unreasonable compensation claims, that access sellers reserve a right to unconditional and unilateral access to change the agreement, and long periods of notice in its agreements.

55. Telenor has previously set exclusivity requirements both during negotiations for access and after the agreement has been entered into. By requiring exclusivity in the negotiating situation, buyers are denied the opportunity to compare different offers and thereby utilise buyer power to be able to

negotiate the most favourable agreement. Nkom finds that operators with significant market power can, through exclusivity requirements, reduce an access seeker's already weak negotiating power.

Quality discrimination

56. A dominant operator might have an incentive to discriminate in terms of quality. Such discrimination might increase the competitors' costs, as measures would have to be taken to compensate for the lower quality. Without compensatory measures, the competitor might have to expect reduced demand. Alternatively, lower quality might impose unreasonable limits on the price that the competing operator can charge in the retail market. Quality discrimination might therefore cause the competitor to incur direct and/or indirect costs. Telenor has both an incentive and the opportunity to discriminate in terms of quality to the benefit of its own retail business, which could affect the company's access seekers in general.

5.3. Summary of competition problems in the market for access and call origination on mobile networks

57. Nkom is of the view that potential competition problems in the market for access and call origination on mobile networks are primarily related to vertical leveraging of market power. Denial of access is the core problem in the market. Such behaviour can prevent new operators from becoming established and, in the worst case, may force established operators out of the market.

58. Nkom finds that multiple factors related to vertical leveraging of market power constitute serious potential competition problems in the relevant market. This is supported by both the incentives that the market structure provides and examples of behaviour. Nkom believes that both the leveraging of market power through pricing and other variables relating to price constitute real competition problems in the absence of sector-specific regulation in the relevant market.

6. General – choice of remedies

59. In this section, Nkom covers the general principles relating to the choice of remedies in the market for access and call origination on mobile networks. The actual choices of specific obligations are discussed in detail in chapter 7.

6.1. The goal of infrastructure-based competition and the connection with service competition

60. A fundamental principles for the regulation is that, in the event that duplication of infrastructure is possible, the use of remedies must support possible infrastructure investments, i.e. facilitate dynamic efficiency. If infrastructure duplication is not deemed possible, the interests of end-users must be protected by making the best possible use of the existing infrastructure through what is known as service competition.

61. Duplication of infrastructure does not necessarily entail full end-to-end infrastructure competition. Nkom believes, for instance, that infrastructure competition may be deemed to exist between mobile networks even if the mobile operators are dependent on purchasing access to transmission capacity, masts and other co-location sites from other infrastructure owners.

62. In previous decisions, Nkom has assumed that infrastructure duplication is possible in the relevant market and that the use of remedies must support this type of investment. The analysis in Annex 1 has thus been carried out in light of the objective of sustainable, infrastructure-based competition.

63. The establishment of a third competitive mobile network has been both a goal and a prerequisite for sustainable competition that has stood firm over many years and is specified in the white paper entitled "Our Common Digital Foundation":³¹

"In order to support the development towards sustainable competition in the mobile market, the sector-specific competition regulation must facilitate the establishment of a third competitive mobile network. Three competing mobile networks will strengthen competition in the mobile market, contribute to more competitive pricing and greater service innovation."

And with the following objective:

"There shall be at least three adequate mobile networks that can compete in both the business and residential markets."

64. In order for a third network operator to contribute to sustainable competition, it must have a market position that can create dynamism and help to discipline other operators in the market over time, so that there are no operators with significant market power. As described in the market analysis, there are a number of factors that are conducive to Norway having a third competitive mobile network within or shortly after the time horizon of the analysis.

65. At the same time, there are a number of uncertainties relating to the pace of development and growth, which are important in order to be competitive at retail and wholesale level in the Norwegian market. Nkom concludes that there is insufficient clear evidence to indicate that the third network would be able to discipline the established operators in the market, regardless of regulation within the time horizon of the analysis, cf. section 5.2.6 of the analysis.

66. The lack of competition at network level (horizontal competition) is the core problem in the market and is an argument in favour of continuing the goal of infrastructure competition as the governing factor in for the choice of remedies in the market for access and call origination on mobile networks.

67. In the previous decisions, Nkom has facilitated that infrastructure investments can take place gradually through access to established infrastructure at different levels (ladder of investment). It is not likely, however, that operators that currently have MVNO access or a service provider agreement will climb the ladder of investment to become full-blown infrastructure owners. Climbing from access as a service provider to MVNO access is more relevant. Telavox (formerly eRate) is an example of an operator that has climbed from service provider access to MVNO access relatively recently. Telavox resells wholesale access and facilitates other access seekers. In this way, the company contributes to competition to offer wholesale access, even though the company itself also relies on buying access to the radio network. Operators with MVNO access have their own platforms for service production and thus better prerequisites for developing new and innovative services for their end-users than service providers. Nkom believes the regulation should continue to safeguard the ladder of investment, in order to facilitate that more operators can contribute to competition based on varying degrees of proprietary infrastructure.

68. In the long term, MVNO operators and service providers will also be potential customer groups for a third network. Investments in infrastructure entail major sunk costs for network owners. However, the marginal costs for the network owners are low within the network's capacity. The

³¹ [Meld. St. 28 \(2020–2021\) \(white paper\) - regjeringen.no](#)

primary financial interests of the network owners are therefore to generate revenues in the network in the form of high traffic volume. It will be most profitable for a network owner to have its own retail customers, but on the other hand, the sale of wholesale access will be a faster way of filling up the network with traffic. MVNOs and service providers could thereby become important customers for the establishment of a third network. In the absence of efficient competition in providing access to networks, Nkom is of the view that this factor also warrants enabling access seekers to have adequate conditions for being in the market.

69. Nkom still believes that the goal of infrastructure competition should be the main principle for the regulation and choice of instruments in the market for access to origination in mobile networks. At the same time, the development of the third network has progressed sufficiently far that the need for comprehensive regulatory protection is considered to be somewhat less than previously. However, Nkom believes that the need for regulatory protection for service competition on existing infrastructure generally remains as strong today as it has been in the past. At the same time, access seekers must prepare to compete in a market without sector-specific ex ante regulation. Nkom will therefore establish conditions which better enable access seekers to negotiate on commercial terms, while at the same time ensuring that the regulation provides a safety net.

6.2. Proportionality

70. The proportionality principle and the proportionality assessment that the national regulatory authority is to carry out in connection with imposing obligations are discussed in more detail in Proposition No. 58 (2002-2003) to the Odelsting in the remark concerning Section 3-4 of the Electronic Communications Act:

“The obligations imposed shall be proportionate, non-discriminatory, based on objective and fair criteria and be 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.”

71. This principle means that when choosing from several alternatives, all of which could promote the objectives equally effectively, Nkom should choose the least burdensome alternative. Under the circumstances, an absolute requirement will also have to be put in place not to impose obligations that are disproportionately burdensome.

72. The principle of proportionality implies that measures should be suited to realise their underlying objective, should not be in excess of what is necessary in each case, and should result in benefits which outweigh the burdens.

73. However, neither the principle of proportionality nor the principle of minimal regulation may be cited in support of the argument that Nkom should not or cannot impose burdensome obligations on providers with significant market power. The core of these principles is that stricter obligations than are necessary shall not be imposed. However, the imposition of more burdensome obligations, such as price controls, could very well be proportionate or necessary where other less burdensome obligations are not considered adequate to achieve the objective of regulation.

7. Explanation of the choice of specific obligation

7.1. Access

7.1.1. General considerations concerning the legal basis

74. Denial of access in a broad sense is the core problem in Market 15, cf. chapter 5 on competition problems.

75. The general provision regarding access in the Electronic Communications Act³² appears 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.”

76. In addition, the Electronic Communications Act also has provisions on a number of specific forms of access, including Section 4-2 on interconnection, Section 4-4 on co-location and Section 4-5 on information and support systems. Pursuant to Section 2-2³³ of the Electronic Communications Act, a reasonable request for access to electronic communications networks may include access for national roaming and access for virtual operators.

77. The extent to which a specific request for access is “reasonable”, must be evaluated based on the criteria in Section 4-1, paragraph two of the Electronic Communications Act:

“In considering whether a request is reasonable an assessment shall be undertaken inter alia of the provider’s interest in control over its own infrastructure against the need to give others the access necessary to be able to offer competing services. In the assessment of what is necessary, account shall be taken of whether in the light of market trends it is technically and commercially possible to install or use competing infrastructure. In the assessment of whether a request is reasonable, account shall also be taken of:

- 1. available capacity*
- 2. the service provider’s investment and investment risk, including any public support and supplement schemes.*
- 3. sustainable competition*
- 4. the need to sustain the network’s integrity*
- 5. intellectual property rights and*
- 6. establishment of pan-European services.”*

78. The list is not exhaustive.³⁴

79. When imposing access obligations, the interests of the infrastructure owner in having its own network must be weighed against the need for other undertakings to have access to facilities that are

³² Access means making facilities and/or services available to other providers, on certain terms, with the objective of offering electronic communication services. The term covers, inter alia, access to networks, network elements and related facilities that can involve connection of equipment by cable or radio-based connection, access to physical infrastructure, including buildings, cable channels and masts, and access to relevant software systems, including operating support systems. The term does not include access for end users.

³³ Proposed new Electronic Communications Act, Section 3-2

³⁴ Proposition No. 58 (2002-2003) to the Odelsting, p. 101.

necessary for offering competing services. Imposing obligations that bolster competition in the short term should not reduce the competitors' incentive to invest in alternative input factors which in turn can bolster competition in the long term.

80. Section 4-1, paragraph two, cf. Section 1-1, of the Electronic Communications Act also states that the consideration relating to sustainable competition should be accorded weight in the assessment of whether a request for access is "reasonable". The consideration is closely related to the objective of duplicating infrastructure and the desire to remedy the core problems in the market.

81. Section 4-1, paragraph one of the Electronic Communications Act also authorises the authority to require a provider with significant market power to "change agreement". This must be specifically understood as the terms in the access agreement between Telenor and the access seeker.

82. Section 4-1 of the Electronic Communications Act must be interpreted in light of Article 12 of the Access Directive, which in turn must be interpreted in light of, inter alia, the concept of access in Article 2 of the Access Directive. The concept of access encompasses not only making facilities and services available, but also the terms on which this is to take place.³⁵ Similar provisions are contained in Article 73 of the Electronic Communications Directive, which must be viewed in conjunction with the definitions in Article 2 of the Directive.

83. In Nkom's opinion, Section 4-1 of the Electronic Communications Act, interpreted in light of the concept of access and Article 12 of the Access Directive, authorises the establishment of a more detailed framework for the access obligation, including stipulating specific requirements regarding how Telenor must fulfil the access obligation.³⁶ The fact that Nkom has such access is also evident from the judgment by the Borgarting Court of Appeal from 2018.³⁷

"In the assessment by the Court of Appeal, Section 4-1 of the Electronic Communications Act, interpreted in the light of Article 12 of the Access Directive, gives sufficient authority to impose obligations that also apply to the content of terms of agreement concerning access to mobile networks."³⁸

84. Section 4-4, paragraph four of the Electronic Communications Act states that Nkom may require providers with significant market power to meet a reasonable request for co-location or other shared infrastructure utilisation, when this is appropriate to promote sustainable competition. On assessing whether such a request is reasonable, this must be evaluated in accordance with Section 4-1, paragraph two.

85. Some types of anti-competitive behaviour might be equated with a denial of access. In practice, anti-competitive behaviour associated with discrimination and/or excessive prices will have to be assessed in relation to the non-discrimination obligation and price regulation, cf. sections 7.2 to 7.5. However, it may be relevant to assess anti-competitive behaviour which is not affected by other specific obligations and which can be equated with denial of access, in relation to the access obligation.

7.1.2. New provision in the proposed new Electronic Communications Act on access to construction infrastructure

86. According to the proposed new Electronic Communications Act, the authorities will, as a first step, assess whether an order for access to construction infrastructure is an adequate remedy for

³⁵ This also follows from a judgment by Kammarrätten in Stockholm of 4 October 2011 (on page 13). See case 1690-10, included in RC 2011:2.

³⁶ Similarly, for Swedish law, the aforementioned judgment by Kammarrätten is based on a "contractual penalty" (the judgment, p.15).

³⁷ LB-2017-72236 (the 'SIM card case'), on page 17.

³⁸ Article 12 of the Access Directive has been replaced by Article 73 of the Electronic Communications Directive.

promoting sustainable competition. It is only if such access proves to be insufficient that Nkom will be able to impose other obligations.

87. The obligation is stipulated in Section 7-1:

"The Authority may order a provider with significant market power to meet any reasonable request to enter into or amend an agreement on access to and the use of infrastructure for the establishment of electronic communications networks. Orders for access to infrastructure may include, among other things, access to and use of buildings and entrances to buildings, wiring in buildings, antennas, towers and supporting structures, poles, masts, pipes, inspection wells and switchgear cabinets. The obligation to comply with requests for access according to this provision may also extend to infrastructure that is not part of the market to which the access obligation relates."

88. In light of the fact that a new Electronic Communications Act is expected to be adopted soon, Nkom has assessed whether access pursuant to the new Section 7-1 is sufficient. However, Nkom believes that, in conjunction with the description of competition problems in chapter 5 and the description of the objective of infrastructure competition and the context of service competition in chapter 6, the market analysis provides a basis for concluding that access to construction infrastructure is not an adequate obligation to remedy the competition-related problems in the market. In light of high expectations regarding coverage among customers, it will still take many years before the third network can free itself from national roaming. During this period, obligations will be needed to ensure predictable access to national roaming. At the same time, Nkom believes there is a need for service competition on existing infrastructure to safeguard the interests of end-users. Nkom believes that there is currently neither sufficient competition to offer access to radio networks in the form of MVNO or service provider access, nor sufficient evidence that the third network will discipline this competition within the time horizon of the analysis.

89. Accordingly, Nkom believes that access to construction infrastructure alone would not be sufficient to promote sustainable competition.

7.1.3. Access for national roaming

90. National roaming is defined as a service which, in accordance with an agreement between two mobile network operators, enables a network owner to provide its end users with services that are produced on the other network owner's mobile network.

91. In section 6.1, Nkom has explained how the principal objective of the regulation in the market for access and call origination on mobile networks has been to achieve sustainable, infrastructure-based competition, and that the electronic communications authorities believe that a third network operator is necessary to achieve this objective. The use of remedies in previous market decisions has therefore been aimed at facilitating the establishment of competing infrastructure. In this context, national roaming has been considered to be an important form of access because it enables new network owners to offer national coverage and thereby be able to offer competitive services while the network is being developed.

92. The third network has entered into a national roaming agreement with Telia on commercial terms. A relevant issue is therefore whether there is a need for regulated access to national roaming in the time-frame covered by the analysis.

93. This market analysis has a time horizon of three years. Nkom finds that ICE will be dependent on national roaming during the entire time horizon of the analysis, in order to be able to provide a sufficiently attractive service to its customers. It is not a given that the agreement between Ice and Telia will apply throughout the time horizon of the analysis. Moreover, Nkom believes that there is no reason to assume that ICE has sufficient negotiating power to discipline offers of access to national

roaming with either Telia or Telenor. Nkom therefore believes that it is necessary to have a regulatory safety network that enables ICE to effectively negotiate such access. Increased bargaining power is considered to be positive, to achieve the objective of sustainable competition in the market.

94. Access to national roaming is not necessarily limited to a question of access for ICE. However, it is unlikely that more operators will establish themselves within the relevant market within the time horizon of the analysis, partly because of the scarcity of access to sufficient frequency resources.

95. Access to national roaming will thus be necessary to ensure that an operator that builds its own mobile network is able to offer competitive services and thereby contribute to achieving the objective of sustainable competition. The access obligation for national roaming will serve as a guide for the frameworks for the content of such an agreement and thereby contribute to increased buyer power and constitute a regulatory safety network. In Nkom's view, no other specific obligations could effectively remedy the competition problem of denying access to a provider that develops its own mobile network. Access for service providers and MVNOs is not a substitute for access to national roaming.

96. Reduced incentives to construct and develop a mobile network are, both for Telenor and the access seeker, a potential drawback of imposing an obligation for national roaming. For Telenor, the effect of investment incentives will largely be associated with how the access obligation influences the expected return on the investments. This will in turn relate to the level of the access charges and the competitive pressure constituted by the access seeker in the retail markets. Other than price, the competitive pressure from the access seeker will relate to coverage and network quality.

97. The right to national roaming may in itself lead to conflicting incentives for access seekers who are building their own network. On the one hand, national roaming can reduce the need to expand own infrastructure and thereby reduce incentives to invest. On the other hand, the right to national roaming can provide increased predictability about own framework conditions and thereby contribute to increased investments. When assessing the investment incentives for access seekers, Nkom believes that it is necessary to take into account that a sector-specific access obligation will not continue beyond the time horizon of this analysis. In view of the asymmetrical relative strengths between the operators in the relevant market, it is Nkom's assessment that the access obligation for national roaming is primarily suited to enabling purchasers of national roaming to increase their investments in mobile networks and thereby achieve the objective of infrastructure-based competition through a third competitive mobile network.

98. With regard to the disadvantages for Telenor of having an obligation to provide access to national roaming, Nkom is of the view that these are more than offset by the benefits such an obligation has for competition.

99. Based on this, Nkom is of the view that it is proportionate to impose an obligation on Telenor to accommodate any reasonable request for access in the form of national roaming with the products and services that are included in the relevant market. How far the obligation will extend can chiefly be determined on a case by case basis through an assessment of the facts together with the content of the term "reasonable request", cf. Section 4-1, paragraph two of the Electronic Communications Act.

100. To provide greater clarity about what the obligation to accommodate reasonable requests for access to national roaming entails, below Nkom will discuss certain factors that are of particular relevance to this form of access.

7.1.3.1. Seamlessness

101. Seamlessness involves the services that are used by an end user not being interrupted, even if one switches network. For example, a call can be connected in one network after which the mobile telephone moves beyond the range of the network's coverage and into the other network's coverage.

In order for the call not to be disconnected, information that handover will take place needs to be exchanged between the two networks. Equivalently, an end user can start a data service, for example, a streaming service, on a network and move over to another network's coverage area while the service is being provided. Seamlessness thus requires an interface to be in place between the networks in order to exchange such information, as well as an agreement on seamlessness.

102. End-users in Norway have become accustomed to high-quality services with a high degree of accessibility and expect to be able to hold a telephone conversation without being disconnected or continuity in access to data services across much of Norway. Where a new network operator is to compete on equal terms with the established operators, the service cannot be of a significantly poorer quality than that of the established operators in terms of coverage.

103. Seamlessness can be provided with one-way or two-way handovers. A one-way handover is where the traffic can be moved from the network with the lowest degree of coverage to the network with the highest degree of coverage, or in other words from the network of the operator buying national roaming to the network of the operator providing national roaming. In the case of a two-way handover, the traffic can also be handed back to the original network if the mobile telephone is moved back inside this network's coverage area. Two-way handover has traditionally been more technically complicated than one-way, but more recent technologies have offered better opportunities for two-way handover.

104. Since two-way handover will enable traffic to be handed back to the network of the party using national roaming, a solution of this nature could reduce the volume of traffic that the purchaser of national roaming will have to purchase in the host operator's network. Two-way handover is therefore important for a purchaser of national roaming to be able to reduce roaming costs, and achieve a volume that gives low unit costs on its own network.

105. Nkom assumes that a request for two-way seamlessness as a starting point would be reasonable within this decision period. If, when such a request is made, the parties themselves do not agree on a solution, Nkom may conduct a specific assessment of whether the relevant request is reasonable, cf. Section 4-1, paragraph two of the Electronic Communications Act.

7.1.3.2. Geographic area covered

106. Access to national roaming can be granted throughout the country (surface coverage) or in geographically delimited areas.

107. With regard to full geographical coverage (in its purest form), all base stations in the host operator's network will be accessible to the provider that has access to national roaming. The field strength will thereby determine which network the call is made in. A call that is made in the visited network will not, in the case of full geographical coverage, be disconnected when the subscriber moves into the range of coverage of its own provider.


108. Where there is full geographical coverage, there will be no dispute over what constitutes a "geographical area" where the new operator has coverage, or whether roaming should be required within individual areas where the purchaser of roaming has certain "white holes" in its own coverage. Full geographical coverage is therefore regarded to be less of a drain on resources for the parties.

109. The "geographically limited" access to national roaming means that certain base stations in the visited network are programmed not to make them accessible to the access seeker. Such limitation of the possibility of roaming may be relevant in areas where access seekers have expanded their own network with sufficient coverage.

110. The network owner and access seeker may have different interests when negotiating surface coverage or geographically delimited roaming. It may be desirable for access seekers to close off access

to roaming in areas where their own coverage is well-developed, to ensure that as much as possible of the traffic is routed via their own network.

111. As a starting point, Telenor offers full geographical coverage in the reference offer for national roaming. However, the reference offer also includes a provision that Telenor shall, upon written request from the access seeker, close access to Telenor's network in specified areas, provided that Telenor considers this to be technically justifiable and the access seeker covers all relevant costs associated with this. Exempt from public disclosure



112. As an operator with a national roaming agreement expands the network, the need to purchase access solely in certain geographically restricted areas may be relevant. This may entail that these areas overall constitute a smaller area than the other parts of Telenor's network. Nkom believes that such a request would normally be reasonable, based on the same assumptions as for the closure of access in specific areas.

113. In Nkom's view, the objective of the Electronic Communications Act suggests that a request for national roaming with full geographical coverage throughout the entire country will normally be reasonable. However, depending on the extent of the requesting party's own network, access in geographically delimited areas may also be sufficient to fulfil Telenor's obligation to provide national roaming. Nkom assumes that any geographical delimitations must depend on a specific reasonableness assessment in each case.

7.1.4. Access for MVNOs

114. 'MVNO access' means that the operator itself invests in infrastructure for the core network. We refer to the description in section 2.5.1 of the market analysis. This form of access therefore presupposes investments in own infrastructure, but to a much lesser extent than for a provider that establishes its own radio network and requests national roaming.

115. Nkom believes that MVNO access is an important instrument in achieving the purpose of sustainable competition, in addition to national roaming. In several ways, operators with MVNO access can play an important role in this context.

116. Operators with MVNO access can directly influence the competition in the retail markets through their own retail offerings. MVNO providers have their own platforms for service production and thus the necessary prerequisites to develop and put together new products and solutions tailored to the needs of end-users. This may be particularly important in the business market. The service providers discussed below do not have the same ability to develop their own services. The possibility of producing services on one's own service platform better facilitates competition on parameters other than price and is therefore suited to virtual operators being more able to represent a competitive threat and having a stronger disciplining effect on established operators. In Nkom's assessment, on this basis MVNO access is important to achieve a broad offering in the retail markets, particularly in the business market.

117. In the wholesale market, currently there are only two network owners that offer access to mobile networks for external providers. However, MVNOs can also position themselves as resellers of wholesale access. For a business concept with resale of wholesale access to be successful, the reseller must probably be able to differentiate its offer of access from the network owners' own offerings. An

MVNO will to a greater extent be able to develop its own solutions and products for resale than operators without their own core network.

118. Televox is an operator which has resold such access to other external operators for a number of years based on a service provider agreement with Telenor that has granted access to Telenor's network. In August 2018, the company entered into an agreement concerning MVNO access with Telenor, and some of the company's customers now offer services on the MVNO platform. This gives Telavox opportunities to develop solutions in its own core network, including in cooperation with third parties. The company offers invoicing, service and customer management platforms in the "cloud".

119. In this way, operators with MVNO access can contribute to creating competition to offer wholesale access, even though such operators also depend on being able to buy access.

120. As stated, becoming established as an operator on the MVNO platform also entails investment in own core network. It is reasonable to assume that operators that make such an investment have a long-term strategy, and this establishment can thus contribute to stability and greater long-term competition than operators that do not invest much themselves.

121. MVNO operators are potential wholesale customers of the third mobile network and can thus also contribute to sustainable, infrastructure-based competition.

122. Both Telenor and Telia offer MVNO access. However, the market analysis (Annex 1) indicates that the market is not tending sufficiently towards sustainable competition, and the description of competition problems indicates that there are a number of potential and real competition problems associated with the vertical leveraging of market power. Based on this, Nkom is of the view that such providers require a regulatory safety network to be able to achieve sufficiently favourable terms.

123. Based on the above, Nkom is of the view that there is a need to impose an obligation on Telenor to accommodate any reasonable request for MVNO access with the products and services that are included in the relevant market. Access to national roaming and service provider agreements are not satisfactory alternatives to MVNO access and, in Nkom's view, the benefits to competition from such an obligation would outweigh the disadvantage for Telenor. Nkom believes that an obligation to accommodate reasonable requests for MVNO access will be proportionate. How far the obligation will extend can chiefly be determined on a case by case basis through an assessment of the facts together with the content in the term "reasonable request".

7.1.5. Access for service providers

124. Service providers (also known as resellers) do not have their own infrastructure, but offer end users access to mobile networks and services based on an agreement for service provider access with a network owner or MVNO. Service providers will normally offer access to mobile networks and services to end users. These providers market and sell mobile services in their own name and with own price plans and provide customer service and customer invoicing themselves. However, Televox is an example of how an operator with a service provider agreement can also resell access to other operators through such an agreement, and facilitate essential services such as invoicing for these operators.

125. The service provider's service production is largely performed by the host operator and the need for investments in infrastructure for such establishment is therefore limited. Reference is made to section 2.5.1 of the market analysis for a description. The service provider segment is therefore a market segment with comparatively low entry barriers, if the terms of access are reasonable and the risk associated with establishment is relatively limited. Facilitators such as Televox have also further reduced the establishment barriers for service providers.

126. In the market decisions for Market 15 from 2006 and 2010, Nkom concluded that it was not necessary to require Telenor to offer access for service providers. At this time, competition to offer access appeared to be functioning satisfactorily, which resulted in a relatively high number of providers with service provider agreements in the market. However, in the 2016 decision, the analysis showed that the number of service providers not owned by the two established network owners had fallen, and there was less evidence of market dynamics. Nkom concluded that there was a need to impose an access obligation for service providers. During the period leading up to the new decision in 2020, there was a further reduction in the number of service providers, and the operator landscape had changed in the form of the entry of new service providers, primarily based on access via Telavox.

127. As of the end of June 2023, the total number of service providers had declined further. If access seekers with Telavox are included, irrespective of the platform that they use (MVNO/TL), there was a total of ten service providers at the end of June 2023. In the previous analysis, Nkom reported 13 service providers (market analysis, table 2).

128. The number of providers of service provider access is unchanged from the previous analysis. Of the network owners, only Telenor and Telia offer such access. Ice does not currently have any external service providers in its network. Telenor's access agreement for MVNOs enables them to resell MVNO or service provider access. As mentioned previously, Telavox has entered into such an agreement, and some of their customers have been transferred to this platform. However, Telavox still has customers on its service provider platform and is therefore also dependent on service provider access. Svea also offers access for service providers, but is itself dependent on service provider access.

129. The number of operators offering access for service providers is thus relatively limited, and a number of the operators are themselves dependent on access to radio networks. Nkom cannot assume that this situation will change within the time horizon of the analysis.

130. Nkom's follow-up of access prices has also shown that service providers are under pressure in terms of margins; see the description of competition problems in chapter 5. In Nkom's view, the regulation and the periodic margin squeeze tests generally determine Telenor's pricing in the wholesale market.

131. Nkom also finds that the opportunity for pure resellers, i.e. providers that purchase all of their service production from the host provider, to develop innovative services is more limited than for providers that are themselves responsible for parts of the service production. In a market with an increasing degree of complexity and connection of various services, it can therefore be challenging for such providers to differentiate their products. Service providers help to increase choice in certain customer segments in both the retail and business markets and contribute to price competition, but limited buyer power in the wholesale market also limits the competitiveness of the service providers in the retail market.

132. In the light of the above, Nkom is of the view that it is still necessary and expedient to facilitate that service providers are able to contribute to increased competition. Nkom cannot see that the competition to offer service provider access functions adequately. Regulated access is suitable to ensure that the terms of access are such that service providers are not prevented from competing in individual retail markets. Nkom is therefore of the view that there are grounds for imposing an access obligation for service provider access.

133. In Nkom's assessment, regulated service provider access should not become such a good alternative to the development of own infrastructure that it reduces the incentives to invest. Nor should the regulation deprive other network owners of the opportunity to offer competitive access. It is important, for example, that the third network has the opportunity to compete in providing wholesale access. However, Nkom is of the view that this is more an issue concerning the regulatory

obligations relating to service provider access compared to other forms of access, rather than an issue of whether access should be imposed.

134. Based on the above, Nkom is of the view that there is a need to impose an obligation on Telenor to accommodate any reasonable request for service provider access with the products and services that are included in the relevant market. In Nkom's view, such an order would be proportionate. Access to national roaming and MVNO access are not satisfactory alternatives to service provider access. In Nkom's assessment, the benefits to competition of such an obligation would outweigh any potential disadvantages for Telenor. How far the obligation extends will chiefly have to be determined in each case through an assessment of the facts together with the content of the term "reasonable request".

7.1.6. Access to co-location

135. Section 1-5, number 17 of the Electronic Communications Act defines co-location as
"shared use of infrastructure or shared used of related facilities that are used or can be used to locate electronic communication equipment".

136. Section 4-4, paragraph four of the Electronic Communications Act grants authorisation to impose an obligation on a provider with significant market power to accommodate reasonable requests for co-location when this is appropriate for stimulating sustainable competition. Whether a specific request is reasonable will be determined by considering the same factors as stated in the general access provision in Section 4-1, paragraph two, cf. Section 4-4, paragraph six, first sentence.

137. Pursuant to Section 4-4, paragraph six, second sentence of the Electronic Communications Act, refusal of a request for co-location must be justified and documented.

138. The obligation to meet a reasonable request for co-location must be linked to the relevant market. A party that requests co-location subject to regulated terms must offer products within the relevant wholesale market and/or one or more of the related retail markets, in order for the relevant regulation to apply.

139. Co-location enables the sharing of costs associated with the rollout of new mobile networks and thus facilitates infrastructure-based competition. This opportunity for cost sharing helps to reduce entry barriers for new operators in the market and cut costs through improvements to coverage for established operators. The ongoing rollout of 5G requires upgrades to existing base stations, as well as many new base stations. Effective access to co-location is thus important for the rapid and cost-effective development of the three mobile networks.

140. Co-location may also reduce any competitive disadvantages and limit higher costs due to the fact that the most attractive sites (with regard to effective radio planning, costs for access to electricity, etc.) have already been used. Thus, co-location will be appropriate to facilitate sustainable competition. Nkom still regards this form of access to be vital to achieving the objective of the regulation since it directly facilitates the establishing of competing infrastructure.

141. In a letter of 17 October 2022, Telenor asked Nkom to clarify the scope of the co-location obligation in the current regulation, in such a way that Telenor is only obliged to provide access to co-location on regulated terms as a complementary service to an operator that has the right to purchase national roaming in connection with the operator establishing a nationwide mobile network. However, Nkom regarded this as a change to the current regulation and has assessed Telenor's request in connection with the new regulation.

142. In a meeting with Nkom, Telenor elaborated on and justified the statement that there is no need for co-location that includes Telia. Telenor notes that Telia's mobile network is a fully fledged

network, and that there is no obligation to provide Telia with access to national roaming. Denial of access is not an issue, as tower companies that are set up to commercialise tower infrastructure would never want to shut out their most important customer groups.

143. When assessing Telenor's request, Nkom stressed the general considerations that lie behind the co-location obligation referred to above. Furthermore, in the market analysis, Nkom describes how Telenor's coverage position is a competitive parameter that underpins Telenor's significant market power. Both Telia and Ice are to be regarded as challengers to Telenor as regards mobile coverage. The roll-out of 5G requires the densification of base stations, and effective access to co-location is important for Telia, Ice and any other operators who establish themselves with their own coverage in the relevant market. Such access will facilitate sustainable competition. Co-location thus takes into account different considerations compared with the other forms of access in the relevant market.

144. Nkom finds no reason why Telenor should treat Telia and Ice differently as regards access to co-location. Good coverage from both operators will be important in order to achieve the goal of sustainable competition in the wholesale market for access and origination on mobile networks. In order to facilitate long-term, infrastructure-based competition, Nkom believes that requests for co-location from both Telia and Ice would normally be reasonable.

145. Accordingly, Nkom is of the view that there is a need to impose an obligation on Telenor to accommodate any reasonable request for co-location from operators within the relevant market.

146. The extent of an obligation to offer co-location must be determined in the specific case through an interpretation of what may be regarded as a "reasonable request". In the decision of 1 July 2016, Nkom considered several questions related to the extent of the obligation to offer co-location. The Ministry of Transport supported the assessments in its appeal decision³⁹ and clarified Telenor's obligation to provide the information that is necessary to initiate a reasonable request.

147. Below, Nkom will describe various cases of what might or might not be considered a "reasonable request".

7.1.6.1. Capacity expansions

148. Section 4-4, paragraph four of the Electronic Communications Act authorises the authority to order an undertaking with significant market power to accommodate requests for co-location in instances where this requires infrastructure capacity expansions, when, after an overall assessment, the request is deemed to be reasonable. A request may be reasonable even if it entails that an undertaking with significant market power must undertake capacity expansions, cf. Section 4-4, paragraphs three and four of the Electronic Communications Act, cf. Section 4-1, paragraph two and the Ministry's appeal decision⁴⁰.

149. However, Section 4-4 of the Electronic Communications Act does not grant authorisation to impose an obligation on a provider with significant market power to offer co-location when this infrastructure does not exist or is not planned.

150. When considering whether or not a request is reasonable, there must, as part of this, be a weighing of interests as regards the disadvantages to Telenor from capacity expansion, compared with the disadvantages to the requesting party from using other possible solutions. In Nkom's view, the assessment of whether a request is reasonable will depend on, inter alia, the types of measures that

³⁹ Decision in the appeal case concerning Nkom's decision on the designation of an undertaking with significant market power and imposing specific obligations in the market for access and call origination on public mobile telephone networks (formerly Market 15), chapter 9.

⁴⁰ Decision in the appeal case concerning Nkom's decision on the designation of a provider with significant market power and imposing specific obligations in the market for access and call origination on public mobile telephone networks (formerly Market 15), p. 72.

have to be implemented to achieve adequate capacity. Typical measures that Nkom considers relevant can be the removal of equipment on masts and in cabins that are not being used, virtual co-location⁴¹, moving equipment to provide space for more cabinets, strengthening of masts, extending masts, expanding cabins, replacing cabins, replacing masts and replacing antennas.

151. Section 4-4, paragraph six of the Electronic Communications Act stipulates that in the assessment of whether a request is reasonable pursuant to paragraph four, an assessment must be made in accordance with Section 4-1, paragraph two.

152. Section 4-1, paragraph two, second sentence, states that *“in the assessment of what is necessary, account must be taken of whether, in the light of market trends, it is technically and commercially possible to install or use competing infrastructure”*. In the preparatory works,⁴² this is summarised as follows: *“In assessing whether technical or economic alternatives exist to the access requested, the authority shall take into consideration whether the alternatives are of a nature that would make it possible to compete with the undertaking with significant market power in the relevant market.”* If alternative solutions for placement provide a poorer starting point for the access seeker in terms of being able to effectively compete in the market, this will be heavily emphasised in the assessment of whether or not a request is reasonable.

153. With regard to the additional factor of “available capacity” in the assessment of reasonableness in Section 4-1, paragraph two of the Electronic Communications Act, Nkom is of the view that when there is sufficient available capacity to comply with a request, it must be deemed to be clearly reasonable, provided that the request as such is also reasonable. Should there be a need to expand capacity to meet the request, the answer is not equally clear. In the assessment, consideration must be made of available capacity, but Section 4-1 cannot be understood to mean that a request will always be unreasonable if there is no spare capacity available. A request for co-location involving building or expanding capacity can be regarded as reasonable when other elements in the assessment are accorded more weight. This includes that the provider may also have an obligation to make customisations and to facilitate other solutions, when the request for co-location is reasonable, even if there is no space in existing infrastructure.

154. Since Telenor can claim construction contributions to cover costs of expansions and new construction, cf. section 7.5.10, the request will in principle be reasonable in cases where the requesting provider can demonstrate that there are no alternative locations that make it possible to offer equivalent area cover at an equivalent or lower cost. This requires that necessary permits are granted from public authorities or private landowners. Based on this starting point, reservations must also be made for whether, in specific instances, there may be circumstances relating to the specific location that entail that the request for co-location can still not be considered reasonable.

155. When multiple measures are relevant, in principle the simplest and most reasonable alternative must be selected. The easier the measure is to implement to increase capacity the less reason there will normally be to claim that the request is unreasonable. This means that when, for example, the measure involves removing equipment that is no longer used on a mast, there will be no grounds for not complying with the request. In these types of situations, the topic of assessment, i.e. “available capacity”, carries little weight. If it is necessary to take more demanding measures, such as extending or replacing a mast, the fact that there is no available capacity might carry more weight. When the alternative to co-location is such that the possibility of competing with Telenor is reduced, the fact that there is no available capacity could still indicate that capacity expansion is within what

⁴¹ See Proposition No. 58 (2002-2003) to the Odelsting, p. 87, which states that *“the definition of co-location also includes ‘virtual co-location’. This entails that when there is no space for the equipment of related providers in existing premises, other solutions must be facilitated. Other solutions might, for example, be co-location in a neighbouring building with cable connection, or in a container outside the premises.”*

⁴² Proposition No. 58 (2002-2003) to the Odelsting, p. 101.

would be considered a reasonable request. Here, the requesting provider may refer to both technical and financial reasons for not using the alternative to co-location.

156. Selection of the simplest and most reasonable alternative entails that, if there are multiple alternative solutions, Telenor must undertake a comprehensive assessment of these alternatives and in principle select the simplest and most reasonable solution. The costs of the measure must weigh heavily in this overall assessment. However, there may be circumstances which suggest that the simplest and cheapest solution would not be a feasible alternative. Such limitations might include conflict with other public legal regulations, private legal agreements, environmental considerations or safety aspects. If there are simpler and more affordable solutions than those selected, Telenor must document the underlying assessment. Below, Nkom gives some examples of which assessments are relevant in relation to the selection of various alternative capacity expansion solutions.

157. Outdoor cabinets at or near holiday cabins could be a simple and affordable way of expanding the capacity at such cabins, particularly in urban areas and close to roads and industrial sites. At the same time, there may be circumstances that render the solution unviable. For example, if an area is defined as an LNFR area,⁴³ it will require dispensation from the municipality or county governor under the Planning and Building Act in order to install a cabinet or other extension at or near an existing cabin. When assessing an application for exemption, visual considerations will be a factor that will be emphasised, and in many cases it is likely that applications for outdoor cabinets will have to be revised in order to address environmental considerations. In such areas, expanding the cabin will be the normal and probably most time-efficient solution. In connection with applications for exemption, a copy of the application must be sent to the requesting party, so that they can follow the case. In all cases where the simplest and most affordable measure is not chosen, the choice must be justified to the requesting party.

158. In cases where the cost difference between an outdoor cabinet and cabin expansion is significant, outdoor cabinets may also be relevant in LNFR areas. In such cases, the requesting party may apply to the municipality/county governor for an exemption regarding the installation of a freestanding outdoor cabinet.

159. Nkom assumes that, in many cases, there will be cost savings from using co-location rather than constructing a completely new mast and base station, even if the co-location will require replacing a mast, because the other existing infrastructure can be used. In addition, there could be instances in which it is difficult to find alternative locations that are technically suitable. The alternative location could result in higher costs because, for example, more antenna masts and base stations have to be constructed, in order to achieve sufficient coverage, than for co-location on the existing mast.

160. There may also be instances in which, for cost-related reasons, it would be a more reasonable alternative to build a new antennae mast in addition to the one that already exists, instead of replacing the mast with a new and larger mast. In such instances, joint utilisation of the other infrastructure will still be possible, while it will not be necessary to transfer antennas and cables from the existing mast. A new antenna mast might also present challenges related to existing land ownership rights, possible dispensations, shadow effects and noise with respect to existing antennas. An overall assessment must thereby be made of whether or not such a measure is appropriate.

161. With regard to replacing antennas, Nkom will not rule out that a request that requires such a measure might also be reasonable. However, the disadvantages for Telenor could be significant. An order to replace antennas could mean that Telenor has to reschedule radio planning and could prevent or complicate systematic development and planned antenna replacement in accordance with the company's coverage strategy and planned technology switch. These types of elements will be very heavily emphasised in the assessment of whether a request for co-location is reasonable. If an

⁴³ Area set aside for agriculture, nature, outdoor activities and reindeer herding.

obligation is to be imposed to offer co-location in instances in which antenna replacement is required, there must be specific circumstances that outweigh the disadvantages imposed on due to the antenna replacement. In Nkom's view, deterioration in quality, coverage and capacity on Telenor's mobile network will be extremely important considerations in the assessment of whether antenna replacement can be ordered, and can result in the request not being considered reasonable. Antenna replacement will nonetheless be one of the most invasive forms of capacity expansion and, as a general rule, will only be relevant if less invasive measures are not possible. If antenna replacement is the only solution and Telenor declines such a request, Telenor must be able to justify this with an actual technical analysis.

162. For capacity expansions, including mast extension, which are covered by construction contributions from the requesting party, Telenor will still have a right of ownership of the location and the new infrastructure. The fact that the requesting party covers the investment costs of the change measure, cf. section 7.5.10, does not imply that the party in question can choose placement at the location. Nkom upholds that existing operators retain their original locations. Telenor has the right to choose its placement, but must cover the full cost of any relocation of equipment. Only in cases where the relocation of equipment is necessary to maintain existing quality, redundancy, coverage or capacity, it will be reasonable that the requesting party covers the relocation costs. In such cases, the costs of the relocation must be stated in the offer, and Telenor must explain to the requesting party why the relocation is necessary. New requesting parties will be given space as it becomes available. Telenor is free to grant requesting parties the top position in the mast.

163. If the capacity expansion entails that the mast has to be replaced with a new mast in the place of the old one, the operator that instigates this measure must bear the costs of moving the equipment.

7.1.6.2. Disclosure of information

164. The access obligation also includes a duty to provide access to all information that is necessary for initiating a request. For instance, in the case of co-location, this will include overviews of the position of relevant base stations with available capacity in the area that is requested, and the technical data that is needed for the implementation.

165. In Nkom's view, the obligation for a provider with significant market power to offer co-location is undermined if the obligation does not also include an obligation to provide information that is necessary for initiating a request. The objective of the obligation regarding co-location and real considerations therefore indicates that an obligation to accommodate reasonable requests for co-location also entails a duty to provide information.

166. An issue in this context is whether the duty to provide information includes an obligation to submit mast drawings prior to a request application. In Nkom's view, the geographical position of various locations and the height of the relevant masts clearly constitute necessary information. Nkom is of the view that it is also of great value for a potential requesting party to have access to further information about the capacity on the mast. Mast drawings will provide an overview of the antenna and can say something about whether the mast has available capacity or whether it is already being fully utilised. For the party the requests co-location, this can be important information in the assessment and identification of the different alternatives. A mast drawing with an antenna overview or equivalent information provided in another way will therefore be information to which Telenor is obliged to provide access.

167. Nkom is aware that mast drawings may contain sensitive information concerning, for example, "radiation direction", antenna types and other coverage-related factors that enable the requesting party to obtain an overview of Telenor's overall radio planning. Nkom nonetheless upholds that mast drawings with an overview of antenna locations or equivalent information can be disclosed in such a way that sensitive information is not disclosed. Nkom therefore requires that Telenor, on request,

issues mast drawings or equivalent information prior to any requests for co-location. Nkom has been informed that such clarifications are normally made in meetings between the parties and that formal requests for information prior to a request are not normally sent. Nevertheless, Nkom maintains the requirement for information disclosure to ensure that such requests are processed efficiently.

168. The required information must be issued to the requesting party without undue delay and within 14 days of the request.

7.1.6.3. Processing time for requests for co-location

169. Nkom believes that there is a need for a requirement to conclude agreements concerning co-location in order to make the access obligation sufficiently effective. Reference is made to section 7.1.8.13 for a more detailed assessment of the need for a requirement to finalise access agreements without undue delay.

170. Nkom is aware that efficient use of time to process requests for access will vary depending on the extent of the measures necessary to be able to facilitate placement, such as inspections and project design. In some cases, Telenor may also need to obtain permission from third parties. The case processing must, however, adhere to the general rule that co-location agreements must be finalised without undue delay. In addition to this requirement, Nkom believes that it is appropriate to stipulate a specific deadline for when offers must be made by. Nkom will normally require offers to be made within six weeks.

171. To enable Telenor to plan its resource requirements in connection with the processing of requests for co-location, Telenor has expressed a need to receive forecasts of the number of placement applications no later than three months in advance of specific requests. Nkom acknowledges that the six-week deadline could be challenging to meet if the number of requests received rises unexpectedly. In any assessment of whether or not the six-week deadline for processing has been breached, submitted forecasts for the number of requests to Telenor will be afforded weight by Nkom. In cases where Telenor sees a need for time beyond six weeks, the requesting party must be notified of this in conjunction with the specific justification. The documentation requirements could shed light on any disagreements concerning the use of time and possible delaying tactics.

172. Forecasts from the requesting party, as well as information from the requesting party in connection with the reservations referred to below, must be treated as confidential and may not be applied to other areas of Telenor's activities than where they are processed.

173. If the requesting party accepts placement proposals, the placement preparations must be initiated and performed without undue delay. If the requesting party encounters unnecessary delays in the implementation of the placement of equipment, Telenor must, at the request of the requesting party, document the time spent on preparation and implementation of placement. Telenor must forward its response to the request for documentation of time spent to Nkom. The response must be sent to Nkom without undue delay and normally at the same time as the response is sent to the requesting party.

7.1.6.4. Right to opt-out

174. In order to achieve an effective co-location obligation, requirements must be set for how long operators that have been offered placement may require placement as a condition, without taking it into use. Nkom has previously upheld that the right to opt-out for operators that are offered placement may be valid for 12 months. This means that the space must be taken into use within twelve months of the date on which the offer of placement is made. The space will otherwise be released to other parties that request access. Telenor itself has also been subject to the requirement. Nkom

upholds this requirement and emphasises that there must be documentable expansion plans for the right to opt-out to be maintained at the expense of a specific request.

7.1.6.5. Further considerations regarding the requirement for documentation and justification of rejection

175. As mentioned in the introduction, it is stated in Section 4-4, paragraph six, second sentence of the Electronic Communications Act that the refusal of a request for co-location must be substantiated and documented.

176. If, prior to a request, an operator has received information from Telenor indicating that, as a starting point, there is no available capacity at the relevant location, the process would be more efficient if the requesting party were to substantiate why the request can nonetheless be considered to be reasonable. Nkom refers in particular to Section 4-1, paragraph two, second sentence concerning whether it is possible to construct or use competing infrastructure.

177. If a request is rejected, the grounds must include all information that is necessary to assess the grounds for the rejection. If the refusal is due to a shortage of capacity, Telenor will be obliged to give a specific account of which options have been assessed and why it will not be reasonable to expand capacity. This is necessary for the requesting party to have a real opportunity to assess the rejection.

178. In cases where a rejection has been made and this is solely because Telenor has reserved space for itself or other providers for future placement, cf. section 7.1.6.4, this must be stated in the grounds for the rejection. The rejection must also state when the right to opt-out will expire.

179. The purpose of documentation is to support the reasoning that is given. Documentation is therefore required if the reasoning itself does not provide sufficient information that is necessary for determining whether the request is reasonable.

180. For the requesting party to be able to rapidly verify whether or not the request was reasonable, the justification, together with accompanying documentation, must be provided at the same time as the rejection is given.

181. If there is an appeal against Telenor's rejection of access, it must, on the other hand, be expected that the requesting party specifies and possibly elaborates on the factors that may justify that co-location must be considered reasonable, so that Telenor can then undertake a renewed assessment of the request.

182. If a provider submits a number of requests with a view to then being able to decide where it is most expedient to implement further development, a simpler form of justification could be used in such a "reconnaissance round"⁴⁴. However, the justification must provide the requesting party with sufficient information to be able to determine which requests the requesting party should proceed further with.

183. In cases where Telenor offers placement, but where this will result in construction contributions, cf. section 7.5.10.3, it must also be possible to document the capacity shortfall, including whether this is due to reservations concerning future location. The offer must also state when the right to opt-out will expire.

184. Nkom will closely monitor the obligation concerning co-location, including processing times and the scope of construction contributions. Nkom thus needs to receive regular reports on Telenor's processing of request applications. Telenor is therefore ordered to submit half-yearly reports on, inter alia, the number of requests received and associated processing times, the number of requests granted, the number of requests with construction contributions, and the number of requests refused.

⁴⁴ Resolution from the Ministry of Transport dated 21 May 2015 in the appeal proceedings concerning the infringement fee in a case of justification and rejection of a request for co-location.

The reports must also include the number of placements completed during the period. The documentation will form the basis for follow-up aimed at ensuring that the preparation and implementation of placements takes place without undue delay.

7.1.7. Other forms of access

185. Whether or not requests for other forms of access must be deemed reasonable may be determined by Nkom based on a specific assessment in each individual case.

186. In the market analysis, Nkom has concluded that international roaming is not part of the relevant wholesale market. The access to offer end users international roaming services is nonetheless a complementary product to the telephony-connected services. Service providers will normally have to purchase such access from their host network, while operators with an MVNO agreement and their own IMSI can gain such access through direct bilateral agreements, through other operators,⁴⁵ or from their host network. The EU's international roaming regulations are implemented in Norwegian legislation under Section 4-14 of the Electronic Communications Act, cf. Section 2-7 of the Electronic Communications Regulation. Article 3 of the EU Regulation requires network owners to meet any reasonable request for wholesale access to international roaming, as direct bilateral agreements, roaming agreements and resale of international roaming access⁴⁶. The maximum prices in the Regulation apply to both cases. This entails that, through this regulation, access seekers may require access to international roaming at regulated maximum prices.

7.1.8. More information about the access obligation

7.1.8.1. Introduction

187. Section 4-1 paragraph one of the Electronic Communications Act grants Nkom the power to require a provider with significant market power to enter into or amend an access agreement. The provision gives Nkom the right to draw up a more detailed framework for the access obligation, including requirements regarding how Telenor must fulfil the access obligation. Nkom may link such requirements to specific terms that cover fairness, reasonableness and timeliness. Article 12(1) paragraph three, and correspondingly in Article 73 of the Electronic Communications Directive, states that the regulator may impose such obligations.⁴⁷

188. Nkom has identified a potential competition problem relating to Telenor's imposition of requirements on individual access seekers that restrict the access seeker's room for manoeuvre and rights.

189. In order to rectify the current competition problem and ensure that the access obligation is as effective as possible, pursuant to Section 4-1 of the Electronic Communications Act, Nkom will stipulate certain specific requirements for how Telenor is to fulfil the access obligation. The following subsections contain a review of the special requirements and assessments of, inter alia, the proportionality associated with each of the requirements.

7.1.8.2. Requirements concerning collateral

190. As a provider with significant market power, Telenor will be able to enforce a requirement to provide collateral, e.g. in the form of bank guarantees and prepayments, either to make it

⁴⁵ Access to international roaming can be purchased e.g. via a "hub" that handles technical connection (the connected operators negotiate prices bilaterally), or as "sponsored roaming", whereby another network offers technical set-up for access to other networks and also sets traffic prices.

⁴⁶ Offer of access to international roaming agreements via the host network or one other network owner.

⁴⁷ The provision has the following wording: "National regulatory authority may subject those obligations to conditions covering fairness, reasonableness and timeliness".

unnecessarily burdensome for competitors to enter into an agreement or to increase the costs associated with the contractual relationship. Telenor will also have a protection-worthy interest in safeguarding itself against possible future losses.

191. Nkom therefore acknowledges that, to a certain extent, Telenor may require the provision of collateral that the contracting party will, for example, cover ongoing traffic costs. However, to prevent Telenor from using the provision of collateral as a means for excluding access seekers from the market, all conditions stipulated by Telenor regarding the provision of collateral in the agreement with the access seeker must be both reasonable and proportionate. This means, *inter alia*, that the requirement for the provision of collateral must be proportionate to the commercial risk to which Telenor is exposed as a result of providing the specific access. This furthermore entails that any such requirement must be proportionate to equivalent requirements made of other access seekers. On assessing whether a requirement for the provision of collateral is reasonable, it may be relevant to consider the level used by Telenor in similar agreements in other Nordic countries.

192. Contractual terms that require the access seeker to pay an advance for leasing and provide bank guarantees will normally be deemed to be disproportionate. The same applies to terms that require access seekers to both provide collateral for construction grants and pay in advance for work.

193. In Nkom's view, the requirements set out in this subsection cannot be regarded as being particularly burdensome in themselves. Nkom furthermore cannot see that the purpose of the requirements can be achieved in another or less restrictive way. In Nkom's assessment, the competitive advantages of tightening up these limitations outweigh the drawbacks for Telenor of restricting the company's scope for manoeuvre. Nkom concludes that the requirements are proportionate.

7.1.8.3. Exclusivity of negotiation and delivery

194. As a provider with significant market power, Telenor could have both an incentive and the opportunity to set exclusivity requirements in order to exclude access seekers from the market. Contractual terms linked to exclusivity constitute a potential competition problem, and Nkom therefore considers it necessary to stipulate requirements that limit Telenor's right to agree exclusivity in the company's agreements.

195. When reviewing the special requirements linked to exclusivity, Nkom will distinguish between exclusivity that affects the right to negotiate access, and exclusivity that concerns the provision of access.

196. With regard to exclusivity concerning negotiation, Nkom targets requirements which restrict the access seeker's access to conduct parallel negotiations on the purchase of access with various host operators, including requirements that limit the access seeker's opportunity to negotiate for a period after the negotiations have been completed. Negotiation exclusivity concerns negotiations to enter into an access agreement, and negotiations to amend an existing access agreement.

197. The market is characterised by a very limited number of operators on the supply side and a limited degree of buyer power. Negotiation exclusivity would entail a restriction of access seekers' ability to compare offers from different sellers of access, in order to achieve better terms. Negotiating exclusivity is thus one way to reduce buyer power and limit dynamics in the market. Any such form of exclusivity would limit competition and thus counteract the purpose of the regulation.

198. Furthermore, Nkom cannot see that Telenor has any protection-worthy interest in demanding negotiation exclusively and concludes that Telenor must not be permitted to set terms for negotiation exclusivity in connection with negotiations to enter into or amend an agreement concerning regulated access.

199. A requirement for delivery exclusivity would prevent the access seeker from using other mobile networks besides the host operator's network to offer its own retail services. Requirements for delivery exclusivity may have a different scope and be imposed at group, brand and SIM level.

200. A requirement for delivery exclusivity also entails a restriction of the access seeker's right to have parallel access agreements with different host operators. In Nkom's opinion, a requirement for delivery exclusivity on Telenor's part would limit the ability of a third network operator to cover some of the access seeker's need for access. Such a requirement would thus be likely to reduce the access seeker's opportunity to achieve infrastructure-based competition through a third competitive grid. In view of the characteristics of the relevant market, Nkom furthermore believes that a delivery exclusivity requirement could weaken the negotiating power of access seekers. Telenor itself also appears to assume that the opportunity to have agreements with two network owners can strengthen the negotiating power of access seekers.⁴⁸ In Nkom's assessment, both the consideration of achieving infrastructure-based competition through a third network operator and the consideration of promoting access seekers' negotiating power appear to limit Telenor's access to set the condition of delivery exclusivity.

201. Nkom acknowledges, however, that Telenor has a protection-worthy interest in setting certain delivery exclusivity requirements. The purpose of the regulation therefore indicates that considerations which justify giving the access seeker the right to parallel access must be weighed against Telenor's protection-worthy interests. In this weighing, Nkom can see reason to give greatest weight to the consideration of safeguarding the access seeker's opportunity for a parallel access agreement. At all events, the purpose of regulation indicates that the regulation may not permit Telenor to set delivery exclusivity requirements that extend further than is proportionate in order to safeguard this interest.

202. On this basis, the starting point for the regulation is that the access seeker has the right to parallel access agreements with several host operators. In order to ensure Telenor's opportunity to safeguard its own protection-worthy interests, the regulation nevertheless puts some restrictions on this right and provides for Telenor to have some access to set delivery exclusivity requirements, cf. below.

203. The access obligation as such is not intended to constitute a competitive advantage for the access seeker compared with owning its own mobile network. Telenor will therefore have a protection-worthy interest in the access seeker not being able to combine regulated access to Telenor's mobile network and simultaneous access under another host operator in order to offer better access to the mobile network than Telenor itself can offer. The regulation acknowledges that Telenor has a protection-worthy interest in being able to prevent an access seeker from using regulated access to gain competitive advantage in the retail market, compared to Telenor's own operations, typically by offering better coverage.

204. In Nkom's view, retail offers that use parallel access to other external mobile networks to offer coverage that, in real terms, can be perceived as better than Telenor itself can offer, will provide such a competitive advantage. Telenor will therefore be able to require that access seekers do not use regulated access to Telenor's mobile network to offer retail products whereby the end user can choose between subscriptions with coverage in Telenor's mobile network, or in another external mobile networks. Telenor will normally also be able to require the access seeker not to grant its existing end users the option to choose between coverage in Telenor's network or coverage in other external

⁴⁸ See Telenor's remarks concerning Market 15 round I of 29 May 2005 (page 19): "Several service providers therefore also have mobile operations in both networks. This gives the service providers a strong negotiating position, in that they can direct all new customers to one of the operators for shorter or longer periods."

mobile networks during the subscription term. The same applies to any offer whereby the choice of coverage is made on behalf of the individual end user, for example as an automated solution.

205. Delivery exclusivity at SIM level entails that an access seeker is not permitted to offer its customers coverage from multiple external mobile networks on the same SIM. SIM (Subscriber Identity Module) denotes the module in the mobile phone that identifies the subscriber in the mobile network⁴⁹. The absence of a delivery exclusivity requirement at SIM level will make it possible for a provider with MVNO or service provider access to offer access to, for example, both Telenor's and Telia's mobile networks on the same SIM. For an operator with a national roaming agreement, the absence of any such requirement would make it possible to offer access in its own network, supplemented with coverage from the two established network providers.

206. In Nkom's assessment, access on multiple networks on the same SIM entails that access seekers can offer coverage which actually may be perceived as superior to the coverage provided by the individual host operators. A requirement from Telenor prohibiting the access seeker from using the access to Telenor's mobile network to offer coverage in Telenor's mobile network and in other external national mobile networks on the same SIM, will therefore be permitted under the regulation.

207. With brand exclusivity, Nkom's aim is that the access seeker is not permitted to combine access in Telenor's network with access under another host operator for the same brand.⁵⁰ With regard to this type of delivery exclusivity, Nkom acknowledges that Telenor has a protection-worthy interest in counteracting that access seekers achieve competitive advantage in a retail market⁵¹ by offering coverage in multiple external mobile networks under the same brand.⁵² Telenor may therefore require that access to Telenor's mobile network may not be offered together with parallel coverage in another external mobile network under the same brand in the same retail market. In Nkom's assessment, the considerations which justify that Telenor may make such a requirement cannot, however, justify that Telenor may be able to refuse an access seeker's use of parallel access for various retail markets, even if these are offered under the same brand. Nkom concludes that Telenor is not to be permitted to include such terms in the company's access agreements.

208. In Nkom's view, the consideration that the access seekers must have a real opportunity to achieve parallel access agreements also speaks against permitting Telenor to include a delivery exclusivity requirement related to the same subscription. In Nkom's view, the opportunity to enforce the restrictions set up by the regulation concerning Telenor's access to set delivery exclusivity requirements, and that the obligations imposed must provide incentives for compliance, gives the same indication. Details of the individual subscription conditions that Telenor has indicated that they require in order to enforce such a delivery exclusivity requirement, is also information that access seekers have a legitimate interest in protecting. Nkom concludes that Telenor is not permitted to set a delivery exclusivity requirement that is related to subscription/subscription conditions.

209. In Nkom's view, exclusive purchase obligations at group level express an exclusivity requirement in its most far-reaching form. This form of delivery exclusivity prevents Telenor's access seekers or companies in the same group being able to purchase access from network owners other than Telenor. The Group exclusivity requirement can weaken buyer power and reduce infrastructure-based competition and, in Nkom's view, goes much further than can be considered proportionate to safeguard Telenor's protection-worthy interests. On this basis, Nkom finds that a requirement of exclusivity at Group level would not be a reasonable and proportionate requirement. Nkom concludes

⁴⁹ A SIM identifies the subscriber towards the mobile network through the access seeker's IMSI (International Mobile Subscriber Identity), country code and network code.

⁵⁰ Brand is the term used here. Examples of brands in the mobile market are given in the market analysis, section 3.1

⁵¹ Cf. the market definition in the market analysis, section 2.4.

⁵² Upon migration, the access seeker can still use two networks for the same brand, cf. section 7.1.8.4 concerning migration.

that Telenor is not to be permitted to include such delivery exclusivity requirements in its access agreements.

210. In Nkom's view, Telenor has an incentive and the opportunity to set delivery exclusivity requirements that extend beyond the company's protection-worthy interest in setting such requirements. Delivery exclusivity requirements that extend beyond Telenor's protection-worthy interests might counteract the purpose of the regulation. In Nkom's view, it is not possible to effectively counteract such behaviour in a less restrictive way than by imposing explicit obligations on Telenor which limit Telenor's opportunity to set such requirements, cf. above. Nkom therefore concludes that the requirements imposed on Telenor here are proportionate.

211. Based on the aforementioned, Telenor is prohibited from setting a delivery exclusivity requirement, with the exception of exclusivity at SIM level, and exclusivity associated with the same brand in the same retail market. Telenor is furthermore prohibited from including other terms, criteria or requirements that might otherwise limit access seekers' opportunity to have parallel access agreements.

7.1.8.4. Migration

212. Telenor has both an incentive and the opportunity to limit access seekers' scope to achieve better access terms in the relevant wholesale market. One possible strategy to achieve this is to restrict the right of access seekers to move their customer base to another host operator (migration). Nkom therefore finds that contractual terms that restrict the right of access seekers to migration represent a potential competition problem.

213. In order to strengthen competition in the wholesale market, Nkom believes it is necessary to set requirements that prevent Telenor from imposing unjustifiable limitations on the opportunities open to access seekers as regards migration.

214. Nkom considers it necessary to set requirements concerning when access seekers can begin migration and the length of time that the migration period may last. Such requirements could make the access obligation more effective and increase predictability for the affected parties.

215. At the same time, Nkom acknowledges that Telenor has a protection-worthy interest in achieving predictability as regards the sale of access.

216. The migration requirements must thereby take account of two considerations in particular. On the one hand, there is the access seeker's interest in being able to change host operator in an expedient manner, and on the other hand there is Telenor's interest in achieving predictability for the sale of access. These considerations will be contradictory to some extent, so that it is therefore necessary that the requirements seek to maintain a reasonable balance between these interests. On weighing the need for the competition against Telenor's interest in achieving predictability for the sale of access, Nkom believes, however, that the need for competition must be given greatest weight.

217. Access seekers might have different needs and requirements in terms of the duration of their access agreement. The regulation does not prevent Telenor from meeting a request for an agreement duration that deviates from the duration in Telenor's reference offers⁵³.

218. After weighing the relevant considerations, Nkom concludes that Telenor may require an access seeker to notify migration to another host operator within a reasonable deadline. A requirement from Telenor that such notification must take place within nine months before migration commences would normally be reasonable, in Nkom's assessment.

⁵³ Nkom's assessments concerning agreement duration are set out in section 7.1.8.9 below.

219. Changing host operator could often entail extensive and complex processes, in particular concerning large customer groups or in the business segment. Furthermore, changing host operator entails a not-insignificant risk of losing end-customers during the process. The access seeker must perform the necessary analyses and draw up a detailed plan for the migration. A migration schedule should include such factors as which customers are to be transferred in which periods, how the dialogue with various customer groups should be, how customers are to be notified, and how the customer centre's increased demand is to be handled. Access seekers will also need to reassess and adjust the migration plan, as they gain experience of implementing the migration. Access seekers will therefore need a certain amount of time to carry out an appropriate migration to a new host operator. Nkom thus believes that it is necessary to require Telenor to give access seekers a reasonable amount of time to migrate to another host operator.

220. In the case of an access seeker that wishes to migrate end-users in the retail market, a request for a migration period of up to 12 months would be reasonable.

221. In the business market, changing host operator could be more complicated. Long-term contracts are often used in this context, and in many cases the provider must take on extensive obligations with respect to the end-user. Such obligations may, for example, include specific requirements regarding networks and coverage. An access seeker might therefore need a longer migration period on migrating customers in the business market than in the residential market. Nkom acknowledges that long migration periods can lead to a lack of clarity concerning the relationship between Telenor's right to require delivery exclusivity at brand level in the same retail market, cf. section 7.1.8.3, and the access seeker's right to migration. For an access seeker that wishes to migrate end-users in the business market, a request for a migration period of up to 24 months would normally be considered to be reasonable.

222. To ensure that the right to migrate is effective, Nkom considers it necessary to prohibit Telenor on a general basis from stipulating requirements, criteria, procedures or similar that prevent or impede the access seeker's ability to migrate.

223. During the migration period, Telenor will not be able to require exclusivity at brand level. This means that access seekers should be able to use coverage in two networks for the same brand. To ensure that access seekers cannot use regulated access to gain a competitive advantage over Telenor, Nkom will permit Telenor to require the access seeker's new sales to take place with coverage in the network of the host operator to which migration is to take place. For the sake of completeness, Nkom stresses that the right to migrate end-customers to another host operator is not intended to interfere with other obligations assumed by the access seeker in relation to Telenor, e.g. in order to purchase a certain volume of traffic during the term of the agreement.

224. The requirements for migration apply within the scope of the individual agreement. To the extent that a migration period exceeds the duration of the relevant agreement, the access seeker must enter into an access agreement for the remaining migration period.

225. In Nkom's opinion, the requirements imposed on Telenor in this regard cannot be regarded as particularly burdensome in themselves. Nkom furthermore cannot see that the purpose of the requirements can be achieved in another less restrictive way. Nkom therefore concludes that the requirements are proportionate.

7.1.8.5. Access to require information from access seekers

226. In many contexts, it will be both appropriate and necessary for Telenor and access seekers to exchange information. For example, Telenor may need to obtain traffic forecasts from the access seeker, or information for use in assessing compliance with contractual obligations. Telenor and access seekers will furthermore need to exchange information during the contractual relationship, typically concerning the access seeker's use of Telenor's wholesale products.

227. Telenor could have an incentive and opportunity to require information from the access seeker to a greater extent than indicated by the need to safeguard protection-worthy interests. Furthermore, Telenor could have incentives to use the information which the company receives as a wholesale provider in its own retail activity.

228. When obtaining forecasts of expected traffic from an access seeker, the access seeker will, for example, sometimes have to provide competitively sensitive information to Telenor. Telenor can therefore not require forecasts beyond what is necessary for dimensioning considerations. Telenor must also ensure that the information that the company receives through the forecasts is only made available to employees who require the information to carry out the objectives the information has been obtained for.

229. Any contractual clauses concerning consequences in the event of actual deviations from forecasts must take into account that both buyers and sellers of access bear the risk of unexpectedly high or low traffic volumes, so that the access seeker does not bear this risk alone. The contractual clause must thus balance the interests of the respective parties.

230. Access seekers have a justified interest in shielding sensitive information that is shared with Telenor. At the same time, Nkom acknowledges that Telenor has a legitimate interest in being able to collect certain types of information. A requirement from Telenor that the access seeker must share information with Telenor must therefore be both reasonable and proportionate.

231. Section 4-13 of the Electronic Communications Act has provisions for a duty of secrecy concerning access and interconnection. According to the provision, each provider must observe confidentiality concerning any information received from another provider prior to, during or subsequent to negotiations concerning access or interconnection agreements. It also appears from the provision that such information must not be used within the company's own business for anything other than what the information was intended to be used for when the information was provided.

232. As an access provider, Telenor will receive various information from the access seeker during the contractual relationship, the provision also covers such information⁵⁴. As Telenor is vertically integrated, as a general rule an access seeker will be a competitor to Telenor's own activity in the retail market, and Telenor will have an incentive to use the information for its own benefit. This obligation entails that Telenor must ensure that such information is retained in its own business and is not disclosed to unauthorised persons, including that such information is not shared within Telenor other than as necessary for the intended purpose of the information, or with any independent third parties, beyond what is strictly necessary. The access seeker will furthermore be entitled to receive further details of how such information is handled.

233. In Nkom's assessment, the limitations to which information Telenor may require from the access seeker and the requirements to protect confidentiality cannot be deemed to impose any great burden. Nkom furthermore cannot see that the purpose of the requirements can be addressed in a less restrictive way and believes that the advantages for competition of setting these limitations outweigh the disadvantages for Telenor through the company's room for manoeuvre being restricted. Accordingly, Nkom believes that the requirements that are imposed in this chapter are proportionate.

7.1.8.6. Unconditional and unilateral changes to individually concluded access agreements

General considerations concerning unconditional and unilateral changes

234. In Nkom's view, an unconditional right for Telenor to make unilateral changes to the company's access agreements to the disadvantage of the access seeker might create unpredictability

⁵⁴ That the duty to maintain confidentiality also applies to information that the provider receives during the contractual relationship follows explicitly from § 2-6 of the proposal for a new e-commerce law.

and entail commercial uncertainty for the access seeker. Nkom takes the view that this commercial uncertainty should be regarded as a cost which the access seeker would have to take into consideration when pricing a service in competition with Telenor and others. Unconditional and unilateral access for Telenor to make changes could therefore limit the access seeker's opportunities to compete effectively in the retail market. This applies regardless of whether the condition, according to its wording, affords such a right to make changes, or whether the condition is worded in such a way that the effect of the condition is equivalent to that of an unconditional and unilateral right to make changes. Accordingly, Nkom believes that it is necessary to prohibit unconditional and unilateral changes to individually concluded access agreements. This prohibition will apply to both agreements concluded according to the reference offer's price structure and agreements entered into with alternative price structures. The prohibition will apply to any changes made to individually concluded agreements, including changes to both price and other contract terms.

235. Nevertheless, Nkom acknowledges that the parties might have an interest in being able to make changes and adjustments to the contractual relationship. Both Telenor and access seekers will therefore benefit from having change mechanisms in their agreement.

236. However, the extent to which such change mechanisms arranged to imply balanced rights and obligations between the parties will largely depend on the balance of power between the parties, and thereby also on the degree of competition in the relevant market. Nkom believes that the balance of power between Telenor as a provider with significant market power on the one hand, and an individual access seeker on the other, and the level of competition in the relevant market, does not guarantee balanced rights and obligations in the agreement. In Nkom's assessment, it is therefore necessary to require Telenor to arrange change mechanisms in the access agreements so that changes can normally only be invoked on the basis of negotiations and agreement between the parties.

237. In exceptional circumstances, Telenor may have a protection-worthy interest in unilaterally implementing changes to the company's access agreements. With regards to changes to purely contractual terms, this will typically apply where changes in regulatory conditions mean that, without any changes, Telenor would be acting in breach of the regulatory requirements. The regulation allows Telenor to include such a unilateral right to make changes in its access agreements. However, before implementing any change in light of such a condition, Telenor must enquire with Nkom as to whether there is a possible conflict between the agreement and the regulation.

238. The regulation also allows for other circumstances to justify a legitimate right for Telenor to implement unilateral changes to the parties' contractual terms. Such a right to make changes nevertheless requires clear and verifiable conditions.

239. To address the need of access seekers for predictability, it is also necessary that both the wording and the effect of the conditions applied by Telenor in order to implement unilateral changes are clearly limited to specific conditions. A unilateral right for Telenor to make changes must not extend beyond what is both reasonable and proportionate. This means that changes that Telenor unilaterally implements in accordance with a predetermined condition must be proportionate to the circumstances that trigger the change and not have a broader scope than is necessary.

240. In the event of any unilateral change, Telenor must justify and document to the access seeker and upon request, to Nkom, that the company fulfils the requirements of this chapter.

241. The requirements regarding the unilateral right to make changes referred to in this chapter apply to changes that are implemented to the detriment of an individual access seeker.

Specific considerations regarding the relationship between reference offers and individually concluded access agreements

242. Reference offers consist of standard terms and standard rates offered to an individual access seeker. Unlike individually concluded access agreements, reference offers do not regulate an individual contractual relationship. For this reason, changes made by Telenor to the standard terms and rates will not be regarded as unilateral changes. The term "unilateral change" presupposes that there is, in principle, a contractual relationship between several parties.

243. As a general rule, Telenor has the right to make changes to the terms of the reference offer provided that the changes lie within the applicable regulation, including price regulation. In this context, Nkom emphasises that the regulation also imposes requirements regarding amendments to the reference offer, cf. section 7.3.6 of this decision.

244. The prohibition of unilateral and unconditional changes to individually concluded access agreements applies irrespective of any price changes that Telenor makes to the company's reference offers. To implement price changes in an individually concluded access agreement, the requirements for the unilateral right to make changes in this chapter apply.

Special considerations concerning price changes in individually concluded agreements that follow the reference offer's price structure

245. In the case of changes to price terms, the conditions may, for example, be linked to market changes. Price changes that Telenor wishes to implement based on agreed change mechanisms must in all cases pass the most recent margin squeeze test. The test must be passed at the time of the change, and Telenor must document the consequences of the change from a forward-looking perspective.

246. The need for predictability also suggests that Telenor must limit the right to make changes in the form of scope and frequency.

247. For access agreements linked to co-location entered into based on the reference offer's price structure, Telenor may in exceptional circumstances have a legitimate interest in implementing changes in line with increased costs in the market. The regulation therefore allows Telenor to take on a unilateral right to make changes based on increased costs, provided that the requirement for cost-oriented pricing is met. The need for predictability also suggests that the right to make changes should be limited in the form of frequency and scope.

Special considerations concerning price changes in individually concluded agreements which do not follow the price structure of the reference offer

248. For access agreements based on alternative price structures, cf. section 7.5.8, Telenor may require change mechanisms different from those stipulated in the reference offer. For such agreements, the general requirements for the unconditional and unilateral right to make changes in this chapter apply. Moreover, the need for predictability also suggests that the right to make changes should be limited. As with the requirements for the right to make changes to agreements that follow the reference offer's price structure, such restrictions may concern frequency and scope.

Summary and conclusion

249. Nkom concludes that Telenor may not incorporate terms in its access agreements that give the company an unconditional and unilateral right to make changes.

250. Nkom furthermore concludes that change mechanisms in Telenor's access agreements must be arranged so that changes can normally only be invoked on the basis of negotiation and agreement between the parties.

251. In exceptional cases, Telenor may implement unilateral changes in the company's access agreements, provided that the right to make changes is linked to clear and verifiable conditions. A unilateral right for Telenor to make changes must not extend beyond what is reasonable and

proportionate. This means that the change must be proportionate to the circumstances that trigger the need for the change and not have a greater scope than is necessary.

252. In the case of agreements that follow the reference offer's price structure, Nkom requires Telenor to both pass the most recent margin squeeze test and document the consequences of the change from a forward-looking perspective. Furthermore, the regulation requires that the right to make changes be restricted, e.g. in terms of frequency and scope. In the case of agreements concerning co-location, change mechanisms may allow for price changes in the event of increased costs, provided that the requirement for cost orientation is met.

253. In Nkom's view, the limitations on Telenor's right to impose conditions on the unconditional and unilateral right to make changes and the obligation to normally have negotiation-based change mechanisms are in themselves not burdensome for Telenor. Nkom is unable to see that the need to ensure balanced access terms can be fulfilled in a less intrusive way. Nkom believes that the benefits for market competition of stipulating the above requirements outweigh the disadvantages for Telenor. Accordingly, Nkom believes that the requirement is proportionate.

7.1.8.7. Requirements regarding notice period

254. Changes to wholesale terms may result in a need for access seekers to reflect the change in their end-user agreements. Pursuant to Section 2-4, paragraph three of the Electronic Communications Act, the notice period for changes to end-user agreements is one month:

"Providers of public electronic communications services must notify end-users of changes to or termination of the agreement. Changes to or termination of the agreement may only enter into force a minimum of one month after the notification is sent to the end-user."

255. The fact that changes in prices or other terms are not notified to access seekers sufficiently in advance of the change taking effect, represents a potential competition problem and could result in access seekers having insufficient time to reflect the change in their agreements with end-users. One solution to this problem would be to require sufficient advance notice of changes to be given. Pursuant to Section 4-6, paragraph one, cf. paragraph four, of the Electronic Communications Act, Nkom may stipulate an extended time limit for such notice, if necessary.

256. In order for providers that purchase regulated wholesale services from Telenor to have sufficient time to ensure that their own terms to reflect changes in Telenor's products or terms, Nkom deems it necessary to ensure that access seekers are given sufficient advance notice of changes before they take effect. Pursuant to Section 4-6, paragraph one, cf. paragraph four, of the Electronic Communications Act, Nkom therefore imposes an obligation on Telenor to notify access seekers of any changes to existing offers that are to the disadvantage of the other contractual party and/or its end-users no later than two months before the change is implemented.

257. Changes that disfavour the access seeker are changes that will normally be considered burdensome or disadvantageous for wholesale customers and/or their end users; for example, but not limited to, price increases. The requirement for two months' notice may not be interpreted as a right to implement unconditional and unilateral changes; see section 7.1.8.6. Regardless of the notification deadline, Telenor must meet the requirements set out in this decision regarding unilateral changes to established individual access agreements. This means that it will only be permissible to implement changes following negotiations and by agreement with the access seeker, except if Telenor fulfils predetermined conditions for implementing unilateral changes. The notice period applies thereafter.

258. The obligation to give access seekers two months' notice represents a continuation of previous decisions, and Nkom finds that the obligation is not disproportionately burdensome for Telenor.

259. A two-month notice period is not necessary in the case of changes which benefit external access seekers and/or their end-users, such as price reductions and improved quality. In line with previous practice, such changes may be implemented with immediate effect. For the sake of completeness, Nkom wishes to point out that, in such cases, Telenor bears the risk that the change will be beneficial.

260. The notice period for price changes for power consumption was set to one month in the amendment decision of 30 January 2023. The decision entailed a temporary change to remedy the unpredictability of the power supply market, which has been characterised by substantial price fluctuations and has made it challenging for Telenor to set wholesale prices for co-location which fulfil its obligation to achieve cost-oriented prices. However, Telenor has entered into a fixed-price agreement that will create greater predictability for wholesale power prices and is expected to reduce the need for changes to the wholesale price.

261. At the same time, the need for two months' notice for price changes regarding power supplies for co-location is not as great as in the case of unfavourable changes in other access agreements, as power supplies for co-location do not entail the same direct need to reflect the change in the network owner's retail prices. A shorter notice period of one month would appear to be sufficient and would help to reduce Telenor's need for major price changes in power billing. This will therefore increase predictability for access seekers and help to ensure competition in the retail market. Thus, Nkom is continuing the one-month notice period for price changes regarding power consumption as a permanent arrangement within the time horizon of the decision.

7.1.8.8. Right of termination in the event of unilateral changes

262. Any right for Telenor to make changes without the access seeker having a corresponding right to exit the contractual relationship would entail unpredictability for the access seeker and might disrupt the balance of power in the contractual relationship. As a provider with significant market power, Telenor might also have both an incentive and an opportunity to use any such right to make changes to weaken the opportunities open to access seekers to compete efficiently, including with Telenor's retail activity. In Nkom's assessment, it is therefore necessary to require Telenor to include mechanisms giving the access seeker the right to exit the contractual relationship with Telenor, if Telenor unilaterally changes the access agreement with the access seeker. Nkom cannot see that the need to ensure balanced access terms for purchasers of regulated access can be achieved in a less invasive way.

263. Nkom concludes that, in its access agreements, Telenor must include a right for the access seeker to exit the contractual relationship with Telenor within a reasonable period of time, if Telenor unilaterally changes the access agreement with the access seeker concerned. The access seeker's right of termination applies to any unilateral change, even where the change is triggered by regulatory issues. During this period, the access seeker must not be bound by new contractual terms.

264. In Nkom's opinion, such an obligation is not burdensome for Telenor. In Nkom's view, this cannot be achieved by less intrusive means. Furthermore, the benefits for competition outweigh the disadvantages for Telenor. Accordingly, Nkom believes that the requirement is proportionate.

7.1.8.9. Agreement duration

265. Access seekers might have different interests with regard to the duration of an access agreement. For example, an access seeker offering its services in a retail market with a longer agreement duration and where the contractual clauses are more individualised, might need a longer agreement duration than a provider that exclusively provides services in the residential market.

266. In order for different access seekers to be able to compete effectively in the retail market and on equivalent terms to Telenor's own retail activity, Nkom considers it important that access seekers can achieve predictability for access and access terms for a certain period going forward. Access seekers thus have a justified interest in negotiating an access agreement with a certain duration.

267. Nkom therefore concludes that Telenor must enter into agreements of reasonable duration.

268. In recent years, Telenor has offered seekers of MVNO and service provider access agreements with a duration of 36 months. Based on experience from these agreements, Nkom believes that 36 months offers a reasonable balance between the interests of Telenor and those of the individual access seekers.

269. Nkom therefore considers an agreement duration of 36 months to be reasonable.

270. Furthermore, Nkom believes that it is necessary to ensure that Telenor cannot refuse an otherwise reasonable request for access solely on the basis that access is requested with a different agreement duration than that used in Telenor's reference offers.

271. In Nkom's opinion, the requirement relating to agreement duration is not burdensome for Telenor. In Nkom's opinion, the purpose behind this obligation for Telenor cannot be achieved in a less intrusive manner. The benefits for competition outweigh the disadvantage for Telenor of not being able to reject an otherwise reasonable request solely because a different agreement duration is being requested. In Nkom's view, the requirement is therefore proportionate.

7.1.8.10. Right to terminate agreements

272. Telenor would have both an incentive and an opportunity to impose termination rights which extend beyond what would be possible in a market that is subject to competition. Such extensive termination rights would increase uncertainty concerning the predictability for access seekers when purchasing regulated access to Telenor's network and could thereby undermine the purpose of the access obligation.

273. Nkom also recognises that Telenor has a justified expectation of, and an interest in, access seekers complying with contractual terms that are in accordance with the regulation.

274. Telenor's right of termination must furthermore be viewed in the light that, under Section 2-5 of the Electronic Communications Act, the provider has an obligation to obtain permission from Nkom before initiating the restriction of use, unless the latter is a consequence of payment default on the part of the access seeker. In cases where no permission is required for the restriction of use, the provision stipulates that the provider against which the restriction of use is directed shall be notified at least one month prior to the disconnection. The requirements in Section 2-5 of the Electronic Communications Act are due to, among other things, end-users' need for continuity in their use of electronic communication services, and due to the competition.

275. Telenor has had terms in its reference offers which, according to their wording, entail that for certain types of breach of the agreement terms, Telenor has an unconditional right to terminate the agreement. In Nkom's assessment, any such wording of the reference offer could create an erroneous impression of Telenor's access to terminate the access agreement, and uncertainty concerning the purchase of regulated access. In view of this, Nkom sees reason to limit Telenor's access to set terms regarding the right of termination in agreements on the purchase of regulated access.

276. Against this background, Nkom believes that requirements should be imposed regarding Telenor's terms for terminating an agreement concerning the purchase of regulated access. Nkom stresses that, in its access agreements, Telenor may only apply terms that afford a right of termination in the event of material breach of contract on the part of the access seeker. Furthermore, Nkom stresses that any provisions in Telenor's access agreements that afford the company the right to

terminate an agreement concerning the purchase of regulated access must reflect the fact that Telenor is subject to further requirements, including with regard to notice, pursuant to Section 2-5 of the Electronic Communications Act. Nkom also notes that Telenor may only grant itself a right of termination in the event of breaches of requirements that Telenor is permitted to impose in accordance with the Market 15 decision.⁵⁵

277. Nkom also notes that Telenor may not apply terms that grant a right of termination in the event of an anticipated material breach. In order for Telenor to have the right to terminate an access agreement, there must have been a material breach of contract on the part of the access seeker. It is not sufficient for Telenor to consider a material breach of contract to be imminent or likely.

278. In Nkom's opinion, limiting Telenor's right of termination to cases where a material breach of contract has occurred is not burdensome for Telenor. In Nkom's opinion, the purpose behind the obligation imposed on Telenor cannot be achieved in a less intrusive manner, and the benefits for competition outweigh the disadvantage for Telenor of not being able to terminate an agreement in the event of any breach of contract. Nkom therefore concludes that the requirement is proportionate.

7.1.8.11. General prohibition on setting unreasonable requirements

279. To limit Telenor's opportunity to set unreasonable requirements in relation to access seekers, Nkom has found it necessary to set several specific requirements for how Telenor is to fulfil the access obligation, cf. above.

280. Certain types of requirements from a provider that is subject to an access obligation could be equated with and entail denial of access. An order to grant access thus in itself entails that certain requirements are made of the party on which the access obligation is imposed, and of the access. In some cases, unreasonable requirements might also be affected by other obligations, and among other things might entail breach of the non-discrimination obligation.

281. In order to make the access obligation sufficiently effective, in Nkom's assessment there is reason to assess whether a general obligation should be imposed on Telenor not to set unreasonable requirements related to the access obligation in accordance with this decision. In Nkom's assessment, this obligation could facilitate greater predictability for affected operators and thereby contribute to more effective access negotiations. Nkom refers to how such a requirement gives scope to provide guidance on Telenor's room for manoeuvre by drawing up key elements of the assessment of whether a given requirement is reasonable. This obligation might also provide a clearer basis for intervening against any unreasonable claims that might be made.

282. On this basis, Nkom believes that the specific requirements set out in section 7.1.8 must be supplemented with a general obligation not to set unreasonable requirements in relation to the access obligation according to this decision. Any such obligation would, among other things, entail that Telenor is not permitted to introduce procedures, criteria, requirements, definitions or other measures that might delay, limit or prevent the fulfilment of the access obligation. Whether a given requirement is considered to be unreasonable will depend on a specific overall assessment. Whether the requirement in question can be deemed to be justified by protection-worthy interests at Telenor, and the effect which the requirement is deemed to have for the competition in the relevant retail markets, will be key factors in such assessment. Another element to which weight might be given is whether the requirement can be considered to be customary in comparable commercial practice.

⁵⁵ In accordance with Section 10-11 of the Electronic Communications Act (Section 16-8 of the proposed new Electronic Communications Act), an agreement that is in conflict with the Electronic Communications Act or a decision made pursuant to the Act shall be invalid between the parties.

283. Nkom is unable to see that a general obligation not to set unreasonable requirements in relation to the access obligation pursuant to this decision can be deemed to be particularly burdensome in itself. Nkom refers to how the access obligation in itself entails certain requirements and that such a requirement can ensure increased predictability. Furthermore, Nkom cannot see how the purpose of the requirement can be achieved in a less restrictive way in relation to Telenor. Nkom also refers to how Telenor cannot be deemed to have any protection-worthy interest in being able to set unreasonable requirements related to regulated access, and concludes that the requirement is proportionate.

7.1.8.12. Indoor coverage

284. Indoor coverage is a challenge at many locations, not least in newer, energy-efficient buildings with thick walls and energy-preserving glass panes. The use of higher frequency bands for high capacity 5G, but shorter range, creates an additional need for dedicated indoor coverage.

285. There are various different solutions to improve indoor coverage. Repeaters receive, amplify and send the signals out on the operator's frequency. Small cells, such as femtocells, normally use the operator's frequencies and can (unlike repeaters) build own coverage. A distributed antenna system (DAS) consists of cables and antennas that are connected to a repeater or base station. WiFi routers connected to the mobile network could provide indoor coverage for both voice and data.⁵⁶

286. Telenor has a Cel-Fi signal booster to improve indoor coverage for businesses. Cel-Fi is a signal booster which, via an internal or external antenna, picks up signals from outside and transmits them indoors.⁵⁷ According to Telenor, the solution is available to all business customers connected to Telenor's network. Only Cel-Fi signal boosters approved by Telenor are permitted to be used in Telenor's network.

287. Voice via WiFi is an alternative solution to amplify indoor mobile coverage. This solution entails connecting the mobile phone to the wireless network inside. There is no need for a mobile signal to make calls or send text messages. Voice is transmitted as data packets via wireless networks. On moving away from the wireless network, the mobile phone will connect to the mobile network. It is a weakness, however, that the call will fail if mobile coverage is not available⁵⁸. At the present time, the solution is not a satisfactory substitute for indoor coverage on the mobile network.

288. For access seekers to have the opportunity to compete on the same terms as Telenor's own retail business, Nkom is of the view that it is important that Telenor should be required to give access seekers access to the solutions that Telenor offers at all times to improve indoor coverage on its own network. This could include improving coverage with base stations or repeaters. Nkom therefore finds that the access obligation also includes indoor coverage. This also entails that Telenor must meet reasonable requests to change coverage and/or improve indoor coverage at the locations requested by the access seeker, just as Telenor would have done for its own retail operations. The rejection of any such request must be justified, cf. Section 4-1, paragraph three of the Electronic Communications Act. The terms for such measures, including prices, must be both reasonable and proportionate.

289. In Nkom's opinion, the requirement relating to indoor coverage will not be particularly burdensome for Telenor. In Nkom's view, this cannot be achieved by less intrusive means. Furthermore, the benefits for competition outweigh the disadvantages for Telenor. Accordingly, Nkom believes that the requirement is proportionate.

⁵⁶ <https://www.telenor.no/privat/dekning/innendorsdekning.jsp>

⁵⁷ <https://www.telenor.no/bedrift/dekning/cel-fi/>

⁵⁸ <https://www.telenor.no/privat/dekning/wifi-tale.jsp>

7.1.8.13. Finalising agreements

290. The analysis of relevant competition problems indicates that Telenor has the incentive and opportunity to use delaying tactics in connection with requests for access. Anti-competitive behaviour of this nature cannot be sufficiently alleviated by an access obligation alone.

291. Section 4-1 of the Electronic Communications Act authorises the stipulation of rules concerning time spent. The right of the supervisory authority to impose such requirements is also set out in Article 73, paragraph three of the Electronic Communications Directive. It is therefore relevant to assess whether the access obligation should be supplemented with a requirement that negotiations for regulated access may not be prolonged unnecessarily.

292. Section 4-1 of the Electronic Communications Act states directly that Telenor, as a provider with significant market power, must document and give grounds for any rejection of a request for access or co-location. The justification must be such that it gives the requesting party an actual opportunity to verify the reasoning for the rejection. An obligation to provide grounds for the rejection of reasonable requests will not, however, be focused directly on the relevant competition problem and, in Nkom's view, will therefore not be adequate in this context.

293. Telenor is ordered to have reference offers for the forms of access described above. Among other things, the reference offer must be able to function as a response to an otherwise reasonable request for regulated access. In Nkom's view, a reference offer requirement could indirectly, to some extent, rectify competition problems related to delaying tactics.

294. An obligation of non-discrimination will also be imposed on Telenor. To some extent, any such requirement could reduce problems associated with delaying tactics. However, in Nkom's view, such an obligation will also not be adequate for alleviating the relevant competition problem.

295. Section 11 of the Norwegian Competition Act could be brought to bear against the use of delaying tactics⁵⁹. However, it is clear to Nkom that this provision is not suited to effectively alleviating the relevant competition problem.

296. Based on this, Nkom is of the view that it is necessary to impose an obligation on Telenor to finalise agreements without undue delay. Other sector-specific remedies are neither individually nor collectively adequate to alleviate the relevant competition problem to a sufficient degree. In Nkom's view, the regulation of Telenor's response time may nonetheless not be considered to be particularly burdensome when viewed in relation to the potential consequences of an unnecessary delay for the other party and thereby for competition.

297. Concerning the co-location agreement, reference is made to the deadline specified in section 7.1.6.3.

298. When requested to do so by an access seeker that has allegedly been affected by delaying tactics, Telenor must without delay document to the access seeker concerned the time spent in connection with the relevant contract negotiations. In Nkom's view, an assessment of affected interests suggests that an access seeker must submit a request for documentation of time spent within three months after the relevant negotiations were concluded. Telenor must forward its response to the request for documentation of time spent to Nkom. The submission to Nkom must be sent without undue delay and normally at the same time as the response is sent to the access seeker.

299. In Nkom's view, the requirements relating to the conclusion of agreements will be not be burdensome for Telenor. Moreover, Nkom does not believe that the requirements imposed on Telenor

⁵⁹ https://lovdata.no/dokument/NL/lov/2004-03-05-12/KAPITTEL_3#§11

can be achieved by less intrusive means. Furthermore, the benefits for competition outweigh the disadvantages for Telenor. Accordingly, Nkom believes that the requirements are proportionate.

7.1.8.14. Overall assessment of proportionality

300. In section 7.1.8, Nkom concluded that a number of requirements must be imposed on Telenor relating to how Telenor must fulfil the access obligation. Nkom has furthermore concluded that each of the requirements is proportionate. In this regard, Nkom will assess the proportionality of the requirements in overall terms.

301. The overall justification for the requirements is that they are appropriate and necessary to rectify the competition issue of unreasonable requirements and to make the access obligation sufficiently effective. The requirements are furthermore based on the experience Nkom has gained from previous regulation periods.

302. Nkom acknowledges that the requirements will entail a reduction of Telenor's freedom to act in a number of areas. Unreasonable requirements related to the purchase of regulated access are a relevant competition issue, however, and could have a significant negative effect on competition. Furthermore, Nkom cannot see that there are less restrictive alternative options to rectify the current competition issue. Nkom thus believes that the advantages for competition of setting these requirements outweigh the disadvantage for Telenor of curtailing the company's freedom to act.

303. Nkom has issued a number of clarifications regarding Telenor's right to implement unilateral changes to individual access agreements. These clarifications are based on the fact that, under the previous market regulation, Nkom identified a number of challenges relating to the access seeker's predictability regarding changes to the agreement.

304. In Nkom's assessment, the clarifications made above would to a great extent be followed by other obligations under the decision. However, the clarifications provide increased predictability for all parties involved and a clearer basis for intervention. The clarifications are thus appropriate to ensure that the regulation can be more effective. On this basis, Nkom concludes that the requirements are also generally proportionate.

7.1.9. Special obligations relating to access

305. Nkom refers to the assessments concerning which special obligations associated with access should be imposed on Telenor in Market 15. The specific obligations imposed on Telenor ASA (referred to hereinafter in this chapter as Telenor) are stated in this chapter.

306. As a consequence of the designation of Telenor as a provider with significant market power in the market, Telenor will have individual obligations associated with access, as a direct consequence of the Norwegian Electronic Communications Act. In these cases, Nkom also has occasion to impose and define such obligations in further detail on the basis of Section 4-4, paragraph four, and Section 4-5, paragraph five, of the Electronic Communications Act.

307. Pursuant to Section 4-1, paragraph one, of the Electronic Communications Act and in line with section 7.1, Nkom requires Telenor to meet any reasonable request for access within the market for access and call origination on public mobile telephone networks. Requests for national roaming, cf. section 7.1.3, MVNO access, cf. section 7.1.4, and service provider access, cf. section 7.1.5, will normally be considered to be reasonable.

308. Requests for access to national roaming with one-way or two-way seamlessness, and/or geographical coverage throughout the country, cf. section 7.1.3.2, will normally also be considered to be reasonable. However, depending on the extent of the requesting party's own network, access in geographically delimited areas may also be sufficient to fulfil Telenor's obligation to provide national

roaming. Nkom assumes that any geographical delimitations must depend on a specific reasonableness assessment in each case.

309. Pursuant to Section 4-1, paragraph one and Section 4-4, paragraph four of the Electronic Communications Act, Nkom imposes an obligation on Telenor to accommodate any reasonable request for co-location within the market for access and call origination on public mobile telephone networks, in line with section 7.1.6. Nkom specifies the following:

- Telenor is obliged to provide the information necessary to initiate a reasonable request for co-location, including a mast drawing with antenna information or similar information. This information must be issued to the requesting party without undue delay and within 14 days of the request.
- A request for co-location that requires infrastructure capacity expansion may be deemed to be reasonable on the basis of an overall assessment, cf. Section 4-4, paragraphs three and four of the Electronic Communications Act, cf. Section 4-1, paragraph two of the Act. Telenor must fulfil reasonable requests for capacity expansion after a weighing of Section 4-1, paragraph two, of the Electronic Communications Act. A request will in principle be reasonable in cases where the requesting provider can demonstrate that there are no alternative locations that make it possible to offer equivalent area coverage at an equivalent or lower cost.
- For capacity expansions, in principle the simplest and most reasonable alternative should be selected. Telenor must perform a thorough assessment of alternative solutions in each individual case. If there are simpler and more affordable solutions than those selected, Telenor must document the assessment on which the choice is based. If an exemption is required pursuant to the Planning and Building Act to carry out a capacity expansion, the requesting party must have a copy of the application when it is submitted. Costs attributable to the exemption application may be charged to the requesting party.
- In cases where Telenor offers placement, but where this will entail construction contributions, it must also be possible to document the capacity shortfall, including whether this is due to reservations concerning future placement. The offer must also state when the right to opt-out will expire.
- The site for placement can be reserved by Telenor or other parties for a maximum of 12 months. There must be documentable expansion plans for the right to opt-out to be maintained at the expense of a specific request during the 12-month period.
- On any capacity expansion, operators that have already deployed equipment will retain their sites. Telenor will determine its own location, but as a general rule must cover the costs of any relocation of its own equipment. In cases where the relocation of equipment is necessary to maintain existing quality, redundancy, coverage or capacity, the costs of the relocation will be covered by the requesting party. In such cases, costs attributable to relocation of equipment must be specified in the offer, and Telenor must explain to the requesting party why relocation is necessary. New requesting parties will be given space as it becomes available.
- Co-location agreements must be finalised without undue delay. Offers of co-location should normally be made available within six weeks. If the requesting party accepts placement proposals, the placement preparations must be initiated and performed without undue delay. When requested to do so by the access seeker, Telenor must document the time spent on the preparation and implementation of a placement. Telenor must forward its response to the request for documentation of time spent to Nkom. The submission to Nkom must be sent without undue delay and normally at the same time as the response is sent to the access seeker.

- Pursuant to Section 4-4, paragraph six, second sentence of the Electronic Communications Act, refusal of a request for co-location must be justified and documented. The grounds must include all information necessary to assess the basis for the refusal. If the refusal is due to a shortage of capacity, Telenor will be obliged to give a specific account of which options have been assessed and why it will not be reasonable to expand capacity. If a capacity shortage is due to opt-outs, this must be stated in the grounds for the refusal, and it must be stated when the right to opt-out expires.

310. For each six-month period, Telenor must submit to Nkom the following statistics for processing requests for placement, broken down by requesting party:

- the number of requests received, including the number of requests processed within six weeks
- the number of requests granted
- the number of requests granted with construction contributions, including the number of requests with construction contributions under NOK 500,000 and over NOK 500,000 respectively
- the number of placements ordered
- the number of booked placements with construction contributions under NOK 500,000 and over NOK 500,000 respectively
- the number of requests rejected, including the most common reason for rejection
- number of completed placements

311. Nkom may request further information if this is needed. The first report in accordance with this decision must include the first half of 2024 and be submitted before 1 August 2024. After this, half-yearly reports must be submitted before 1 February and 1 August each year.

312. Pursuant to Section 4-1 of the Electronic Communications Act, further requirements are imposed on Telenor for how Telenor is to fulfil the access obligation, cf. section 7.1.8 and below.

313. Any requirement from Telenor for the provision of security must be reasonable and proportionate. This entails, among other things, that such requirements must be proportionate to the commercial risk to which Telenor is exposed, and must be proportional to equivalent requirements made of other access seekers. For further details of the requirements, see section 7.1.8.2.

314. Telenor is not permitted to set terms concerning negotiation exclusivity in connection with negotiations to enter into or amend an agreement on regulated access, cf. section 7.1.8.3.

315. Telenor must offer access without provisions concerning delivery exclusivity. Nevertheless, the prohibition does not include delivery exclusivity at SIM level. The prohibition will also not prevent Telenor from requiring that access to Telenor's mobile network may not be offered together with parallel coverage in other external mobile networks under the same brand in the same retail market. Telenor may furthermore require that access seekers do not use regulated access to Telenor's mobile network to offer retail products whereby the end user can choose between taking out subscriptions with coverage in Telenor's mobile network or in other external mobile networks, and will normally also be able to require that the access seeker does not enable its existing end-users to choose between coverage in Telenor's network or coverage in another external mobile network during the subscription relationship. Telenor is prohibited from setting other exclusivity requirements. Nkom refers to section 7.1.8.3.

316. Any requirements imposed by Telenor which limit the access seeker's opportunity for migration must be both reasonable and proportionate. A requirement from Telenor for the access seeker to give up to nine months' advance notice before migration commences will normally be

deemed to be reasonable. Telenor is obliged to grant the access seeker a migration period of reasonable duration. For an access seeker that is to migrate end-users in the residential market, a request for a migration period of up to 12 months will normally be deemed reasonable. For the business market, a request for a migration period of up to 24 months will normally be deemed reasonable. Telenor may not set requirements, criteria or procedures, etc. which prevent or impede the access seeker's opportunity to use the right of migration to another host operator, and during the migration period Telenor may not require brand exclusivity, cf. section 7.1.8.4.

317. A requirement from Telenor that the access seeker must share information with Telenor, or the party that Telenor appoints to act on its behalf, must be both reasonable and proportionate. Telenor must safeguard the confidentiality of such information, which includes ensuring that the information is not shared internally within its own organisation except insofar as is necessary for the purpose of collecting the information, cf. the Electronic Communications Act. section 4-13 and this decision 7.1.8.5.

318. Telenor cannot impose conditions that afford Telenor an unconditional right to implement changes to the company's access agreements. Telenor is obliged to design change mechanisms in the access agreements in such a way that changes can normally only be applied following negotiations and by agreement between the parties. In exceptional cases, Telenor may implement unilateral changes to the company's access agreements, provided that the right to make changes is linked to clear and verifiable conditions and limited in terms of frequency and scope. Moreover, a unilateral right for Telenor to make changes must not extend beyond what is reasonable and proportionate, cf. section 7.1.8.6. For agreements that follow the reference offer's price structure, Nkom requires Telenor to both pass the final margin squeeze test and document the consequences of the change from a forward-looking perspective.

319. Telenor must give advance notice to purchasers of national roaming, MVNO access, service provider access and co-location of any changes to existing offers that disfavour the other parties to the agreements and/or their end-users, and by no later than two months before the change is implemented, cf. section 7.1.8.7, cf. Section 4-6, paragraph one, cf. paragraph four, of the Electronic Communications Act. Information regarding other changes to the terms of the agreement shall be notified without undue delay after the changes have been decided upon. Notice of changes to prices for power consumption under Telenor's regulated terms for co-location must be given no later than one month before the change enters into force.

320. If Telenor sets the condition of a right to unilaterally change an access agreement, the agreement must also give the access seeker the right to withdraw from the contractual relationship within a reasonable period of time in the event of any such change, without being bound by new terms. Reference is made to section 7.1.8.8.

321. Telenor must enter into agreements of reasonable duration that provide access seekers with the necessary predictability. Telenor may not refuse an otherwise reasonable request for access solely on the basis that access is requested with a contract term of a different length to Telenor's reference offers, cf. section 7.1.8.9.

322. In its access agreements, Telenor may not include terms that afford Telenor the right to cancel the agreement, unless the access seeker is in material breach of the agreement. Telenor may not apply conditions that grant the right to cancellation in the event of an expectation of a material breach. Any provisions in Telenor's access agreements which grant Telenor the right to cancel the agreement must reflect how Telenor is subject to specific requirements, including notification requirements, pursuant to Section 2-5 of the Electronic Communications Act. Reference is made to section 7.1.8.10.

323. A general obligation is imposed on Telenor not to set unreasonable requirements in relation to the access obligation pursuant to this decision, cf. section 7.1.8.11.

324. Telenor must meet reasonable requests from the access seeker to change coverage and/or improve indoor coverage at the locations requested by the access seeker, just as Telenor would have done for its own retail business. Telenor's terms for such measures must be reasonable and proportionate, cf. section 7.1.8.12.

325. All agreements concerning access and call origination in Telenor's mobile network must be negotiated without undue delay. If access is denied, Telenor must provide the requesting party with a documented and justified refusal of the request, cf. Section 4-1, paragraph three, and Section 4-4, paragraph five, of the Electronic Communications Act. The grounds for refusal must contain all details that are necessary to assess the basis for refusal, such as the reason why access has been denied, together with the necessary documentation. Concerning any claim of delaying tactics, Telenor must send Nkom a copy of Telenor's response on any request for documentation of the time spent. Reference is made to section 7.1.8.13.

7.2. Non-discrimination

7.2.1. General considerations concerning the legal basis

326. In chapter 5, various types of discrimination are identified as competition problems in the relevant market.

327. Section 4-7 of the Electronic Communications Act authorises Nkom to impose a non-discrimination obligation. The first and second paragraphs of the provision read:

"The Authority may direct a provider with significant market power to offer interconnection and access to external providers on non-discriminatory terms.

The Authority may direct a provider with significant market power to offer interconnection and access to other providers on the same or equivalent terms and of the same or equivalent quality as provided for internal operations, subsidiaries or partnerships."

328. The provision grants the authority to impose an obligation of non-discrimination in two areas: The first paragraph grants the authority to require non-discrimination between external providers. The second paragraph grants the authority to require non-discrimination between external operations and own operations.

329. It is evident from the preparatory remarks concerning the provision⁶⁰ that non-discrimination must be viewed in particular in the context of the purpose of the access regulations and that the requirement of access on non-discriminatory terms must compensate for the disadvantage of the provider not itself owning or controlling the necessary infrastructure. It is furthermore stated that non-discrimination entails the requirement of the same functionality, and that "[the] a decisive aspect in a competition context is that the offered 'service' is designed so that it can be competitive on equal terms".

330. The overall purpose of requiring access to be granted on non-discriminatory terms is thus that access, with the associated terms, must be designed so that it can be competitive on equal terms. Non-discrimination will therefore require a provider with significant market power to treat similar situations equally with regard to access, prices, price structure⁶¹, quality, information and other terms, irrespective of the business that they concern. Non-discrimination may also mean that different cases must be treated differently.

⁶⁰ Cf. remark concerning the provision, cf. Proposition No. 58 (2002-2003) to the Odelsting, p. 104-105

⁶¹ Reference is also made to the Ministry of Transport's decision of 9 March 2018, page 47, see <https://www.nkom.no/ekom-markedet/markeder/marked-15-tilgang-til-mobilnett>

331. Non-discrimination does not necessarily mean that all enterprises that are to be regarded as equal must have identical terms, but that they must all be given equal opportunities.

7.2.2. Assessment of the need for a non-discrimination obligation

332. A provider with significant market power may have an incentive and an opportunity to discriminate between external customers as a strategy for exploiting market power. Such discrimination can take place with regard to parameters such as access, price level, price structure, quality, information and other terms. One effect of such a strategy might be that a provider with significant market power offers poorer terms to providers that pose the greatest competitive threat in the associated retail markets, or offers benefits to providers that may offer a quid pro quo.

333. A vertically integrated provider with significant market power may also have the incentive and opportunity to discriminate between its own and other providers' retail activities in order to leverage market power from the wholesale market to the related retail markets. The discrimination may take place with regard to the same parameters as for discrimination between external enterprises. A requirement for non-discrimination could prevent the leveraging of market power from the wholesale to the retail market, by reducing the opportunity to engage in exclusionary behaviour with respect to other providers. In this context, exclusionary behaviour means attempts to deny access to and shut out competitors from markets by operating with prices, quality differences, information bias or other access terms that favour the provider's own activities.

334. In the decision of 14 May 2020, Telenor became subject to a non-discrimination obligation with regard to prices and other terms for access to national roaming, MVNO access, service provider access and co-location. The requirement applied between external operations within the same access form, and also between own and external operations.

335. However, discriminatory behaviour can to some extent be remedied through other obligations, such as obligations concerning access, price controls and/or transparency obligations. A transparency obligation can make it more difficult to maintain a discriminatory practice, partly because the behaviour is made more visible. The obligation to provide access in combination with price control will limit the scope for manoeuvre of the provider with significant market power.

336. The obligation of non-discrimination between external enterprises affords access seekers security in the form of everyone being offered equal terms. However, Nkom considers that, in some cases, such an obligation could limit individual negotiations concerning access between Telenor and external access seekers. Nkom has over a long period of time worked to ensure that access seekers are offered alternative price structures that are tailored more closely to their business and market strategy. To date, however, access seekers have received few offers of price structures other than those stated in the reference offers, despite the fact that this has been an expressed wish. In this context, Telenor has expressed the view that uncertainty regarding the non-discrimination obligation and the authorities' interpretation of the obligation has prevented Telenor from offering alternative price structures to access seekers who request such structures in negotiations.

337. To facilitate a greater degree of individual negotiations concerning access terms, including alternative price structures, Nkom is therefore not imposing a prohibition on discrimination between external parties pursuant to Section 4-7, paragraph one of the Electronic Communications Act. To create the greatest possible room for negotiation, such an easing must apply to the non-discrimination obligation as regards both price and other terms. This will mean that Telenor could, for example, offer other, more individually tailored price structures than the structure of the reference offer to a single operator, in return for taking on obligations that deviate from the terms of the reference offer. See section 7.5.8 for a more detailed account of the requirement to accommodate reasonable requests for alternative price structures.

338. The obligation of non-discrimination between Telenor's internal operations and external access seekers in accordance with Section 4-7 paragraph two of the Electronic Communications Act is intended to ensure that Telenor does not set access terms which favour the company's own retail business to the detriment of external access seekers. The requirement will thus ensure that external access seekers have the same conditions as Telenor's own end-user operations to compete effectively in the retail market. Such an obligation is an important prerequisite for the ability of access seekers which do not have their own network to compete. Nkom believes that there is a need to impose a non-discrimination obligation on Telenor concerning access between internal and external provision with regard to price and other conditions. The reference offer must therefore be formulated in line with the requirement for non-discrimination between internal and external provision, as regards price and other conditions to ensure equal opportunities for both access seekers and Telenor's own operations.

339. Flexibility and equal opportunities for access seekers is the reason why Nkom requires Telenor to accommodate requests for alternative price structures in section 7.5.8 of the decision. However, a non-discrimination obligation pursuant to Section 4-7, paragraph two of the Electronic Communications Act could also limit negotiations concerning individual alternative agreements in that Telenor believes that there is uncertainty and ambiguity surrounding the interpretation of the requirements, including whether individually negotiated agreements could be in breach of the non-discrimination obligation at a future date during the agreement period. To facilitate individual negotiations concerning alternative agreements, including alternative price structures, Nkom is imposing as few requirements as possible on the terms. The price terms in individually concluded alternative agreements are therefore not covered by price controls, and Nkom does not consider it appropriate to impose requirements concerning accounting separation in order to follow up requirements for non-discriminatory prices for such agreements. Access seekers who enter into alternative agreements based on a desire for a different price structure than the reference offer must assume both the responsibility and the risk for price terms and other terms that deviate from the reference offer during the agreement period. Such terms will not be considered to be in conflict with the non-discrimination obligation, provided that Telenor can prove that, at the time of the agreement, the access seeker was aware of the deviations from the reference offer.

340. This easing of the non-discrimination obligation may mean that some access seekers receive better or more individually tailored terms than others. However, Nkom believes that other requirements regarding access, cf. section 7.1.8, and the option to choose the reference offer when entering into an agreement, will largely compensate for this easing and facilitate equal opportunities, so that external access seekers are able to compete effectively in the retail market. However, negotiating individual alternative agreements places increased demands on the access seeker's due diligence when entering into agreements. Nkom therefore requires deviations from the reference offer to be clearly stated to the access seeker at the time of the agreement. Reference is made to the requirement for clear terms for alternative agreements in section 7.5.8.3.

341. Nkom considers that the benefits that can be gained through facilitating more individual negotiations outweigh the disadvantages for access seekers through the discontinuation of the non-discrimination obligation between external parties with regard to all forms of access.

342. Discriminatory terms might also fall under Section 11 of the Norwegian Competition Act. Any reactions from the Norwegian Competition Authority might consist of an order that the unlawful situation must cease, with an infringement fee. However, the competition problems associated with discrimination between internal and external provision in the relevant market indicate that relatively detailed requirements for non-discrimination between internal and external provision should be drawn up in advance. The need for predictability and prompt intervention therefore indicates that the provision in the Competition Act will not provide an adequate degree of protection against discriminatory behaviour as regards this form of discriminatory behaviour in the relevant market.

343. Accordingly, Nkom believes that there is a need to impose a non-discrimination obligation on Telenor concerning internal and external provision, with regard to both price and other terms. For agreements established in accordance with the reference offer, the non-discrimination obligation will apply to all forms of access imposed in section 7.1. In the case of individually negotiated alternative agreements, the access seeker is responsible for the terms that deviate from the reference offer, so that these terms cannot be claimed to be discriminatory during the agreement period.

344. Discrimination between internal and external provision can occur in many different forms. It is therefore difficult to identify every consequence of an obligation of non-discrimination in advance. Below, however, Nkom specifies a number of types of cases and specify the content of the obligation not to discriminate between internal and external provision. It is, however, neither expedient nor possible to specify all conceivable situations. This presentation must therefore not be considered to be exhaustive, and concrete assessment would be required of whether given behaviour or agreement terms entail discrimination.

7.2.3. Further considerations regarding the content of the non-discrimination obligation between internal and external provision

345. As a vertically integrated operator with its own mobile network, Telenor has complete flexibility to design its retail products in terms of price, price structure and other conditions. The non-discrimination obligation between internal and external provision entails that, as far as possible, the access that Telenor offers to access seekers must afford the same opportunities and flexibility to design retail products as Telenor's own retail operations. Telenor's wholesale offer must therefore have characteristics so that, in terms of technical features, quality and price, the access seeker has the same opportunities as Telenor to offer products in the retail market.

346. Offering access to the access seeker that affords the same opportunities as Telenor's own retail operations entails that the access is not limited to mirroring the products Telenor itself provides at any time in the retail market. However, the aim of facilitating service innovation dictates that a distinction should be made between the facilitation required of Telenor to compensate for the fact that the access seeker does not itself own or control the necessary infrastructure, and the development that the access seeker can undertake itself.

347. The non-discrimination obligation entails that the access seeker must be given access to the same carrier services as Telenor uses to realise its retail services, within the framework of the access obligation. With regard to the data transmission speed and quality, the speed and quality that are offered to Telenor's own retail operations at any time must also be made available to external access seekers.

348. The non-discrimination obligation dictates that services used by Telenor to increase the quality of its own services, and which use input factors that are subject to the access obligation, must also be made available to access seekers, so that it can offer services to its end-users that are of the same quality as that offered by Telenor. If this is not technically possible in specific cases, Nkom must be informed of this in writing without undue delay and before the services are taken into use by Telenor's own retail operations.

349. In some instances, access seekers must make changes to their own equipment etc. to be able to make use of the improved quality. In such cases, Telenor is responsible for whatever lies within Telenor's control sphere, while the access seeker is responsible for making the necessary upgrades and for facilitation within its own control sphere. Telenor must ensure that the access seeker receives all information that the access seeker can reasonably be deemed to require, in order to make adjustments for its part.

341. In order for access seekers to have conditions equivalent to Telenor's own retail operations, to be able to compete effectively in the retail market, it is necessary that they receive relevant information, including the necessary technical documentation, of the same quality and at the same time as Telenor's own retail operations. On request, Telenor must be able to document to Nkom that the requirement to provide information on non-discriminatory terms is fulfilled.

342. The non-discrimination obligation entails that Telenor must give the access seeker information concerning fault rectification at the same time and with the same content as to the company's own operations. If Telenor's retail operations offer compensation to end-customers that have experienced faults/downtime, Telenor will be obliged to offer access seekers compensation that gives the same opportunity as Telenor's own retail operations to offer compensation to the affected end-user.

343. The non-discrimination obligation furthermore entails that Telenor must give access seekers information about changes in the network (such as changes in technology) that are of significance to access seekers' offers in the retail market, at a time that gives access seekers equal opportunities to arrange themselves in the same way as Telenor's own retail operations.

344. The non-discrimination obligation entails a general requirement for Telenor to make all wholesale products subject to the access obligation available to the access seeker within a reasonable period of time. The requirement entails, inter alia, that Telenor must ensure that the access seekers have sufficient time to develop and adapt their own IT systems and processes, so that they have the same opportunities as Telenor's retail operations to plan and offer new services in the retail market. Telenor therefore cannot make new or changed wholesale products that are subject to the access obligation available to access seekers at a later time than when they are made available to the company's internal retail operations.

345. The non-discrimination obligation as regards conditions other than price does not prevent Telenor, at the request of and following negotiations with the access seeker, from entering into an alternative agreement that deviates from the terms of the reference offer. Deviations from the reference offer must appear in an appendix to the individually negotiated access agreement. Provided that deviations are made clear to the access buyer in this way, such terms will not be considered to be in conflict with the obligation of non-discrimination.

346. In terms of price, the non-discrimination obligation entails that the price level of Telenor's reference offers may not be higher than the price that the company could charge its own retail operations. However, Telenor has no explicit access agreement between the company's wholesale operations and retail operations. Follow-up of the non-discrimination requirement in terms of price therefore cannot be based on direct comparison of the content of an internal access agreement with Telenor's offer of access to external purchasers. As section 7.4 shows, Nkom will use accounting separation as an instrument to follow up the requirement of a non-discriminatory price level. However, accounting separation is an aggregated tool for monitoring non-discrimination. The requirement for non-discrimination between internal and external provision may thus also be followed up in other ways. However, Nkom assumes that other regulatory requirements will limit the need for such follow-up.

347. In accordance with section 7.5.8, Telenor must meet any reasonable requests for alternative price structures. For individually concluded alternative agreements, the access seeker must assume both the responsibility and the risk as regards the price terms that are concluded for the duration of the agreement. The non-discrimination obligation must be understood as meaning that the price terms of such individually concluded alternative agreements will not be considered to be discriminatory during the duration of the agreement.

7.2.4. Proportionality

348. The non-discrimination obligation is less extensive compared with the decision of 14 May 2020. The obligation does not include the prohibition of discrimination pursuant to Section 4-7, paragraph one of the Electronic Communications Act, but continues the prohibition of discrimination between internal and external provision pursuant to Section 4-7, paragraph two of the Electronic Communications Act. Nor can individual alternative agreements that have been concluded be claimed to be discriminatory as regards the terms that deviate from the reference offer.

349. Nkom considers an order for Telenor to ensure non-discrimination between internal and external provision in Market 15 to be both proportionate and appropriate to achieve the purpose of regulation. Nkom believes that non-discrimination is less burdensome obligation in relative terms. At the heart of the obligation is equal opportunity and equal treatment.

350. Nkom finds that the competition-related advantages of a non-discrimination obligation between internal and external provision clearly outweigh the burdens for Telenor. Additionally, Nkom does not consider there to be any other remedies that are adequate for rectifying the competition problems that have been identified linked to discrimination between internal and external provision.

351. Accordingly, Nkom concludes that the abovementioned non-discrimination obligation between internal and external provision is proportionate.

7.2.5. Special obligations relating to non-discrimination between internal and external provision

352. Nkom refers to the aforementioned assessments concerning which special obligations associated with non-discrimination are to be imposed on Telenor in Market 15. The specific obligations imposed on Telenor ASA (referred to hereinafter in this chapter as Telenor) are stated in this chapter.

353. Pursuant to Section 4-7 paragraph two of the Electronic Communications Act, Nkom orders Telenor not to discriminate between internal and external provision with regard to price or any other terms for access for national roaming, MVNO access, service provider access and co-location.

354. The non-discrimination obligation between internal operations and external operations entails in particular that:

- Telenor's wholesaler offer must be designed in such a way that the access seeker has equal opportunities in technical, quality and price terms to develop and offer products in the retail market that Telenor has in its own retail operations, cf. section 7.2.3. The access is not limited to being able to mirror the products Telenor offers the retail market at any time, but must give flexibility and the opportunity for service innovation for the access seeker, in line with Telenor's own operations.
- Telenor must give the access seeker access to the same carrier services that Telenor uses to achieve its retail services, within the scope of the access obligation, cf. section 7.2.3. With regard to the speed and quality of data transmission, the speed and quality offered to Telenor's own retail operations must at all times also be made available to external access seekers.
- New services and product development that Telenor is to launch in the retail market, or to use in order to improve the quality of its own products within the relevant markets, must normally be made available to access seekers, so that they can offer their end-users services of equivalent quality to that offered by Telenor to its own operations, cf. section 7.2.3. If this is not technically possible in specific cases, Nkom must be informed of this in writing without undue delay and before the services are taken into use by Telenor's own retail operations. If

the reason that prevented this ceases to exist, Telenor must offer the product concerned without undue delay.

- Telenor must provide access seekers with current information so that they have the same opportunities as Telenor's own retail operations to compete effectively in the retail market, with the same level of quality and at the same time as Telenor's own retail operations. Upon request, Telenor must be able to document to Nkom that the requirement to provide information on non-discriminatory terms is fulfilled, cf. section 7.2.3.
- Telenor must give the access seeker information concerning fault rectification at the same time and with the same content as to the company's own operations. If Telenor's retail operations offer compensation to end-customers that have experienced faults/downtime, Telenor will be obliged to offer access seekers compensation that gives the same opportunity as Telenor's own retail operations to offer compensation to the affected end-user, cf. section 7.2.3.
- The non-discrimination obligation does not prevent Telenor, at the request of and following negotiations with the access seeker, from entering into an access agreement with terms that deviate from the terms of the reference offer. Deviations from the reference offer must appear in an appendix to the individually negotiated access agreement. Provided that deviations are made clear to the access buyer in this way, such terms will not be considered to be in conflict with the non-discrimination obligation.
- Telenor must make wholesaler offers at prices that must not be higher than the company could charge its own retail operations, cf. section 7.2.3. In accordance with section 7.5.8, Telenor must comply with reasonable requests for alternative price structures. The non-discrimination obligation must be understood as meaning that the price terms of such individually concluded alternative agreements will not be considered to be discriminatory during the duration of the agreement.

7.3. Publication and reference offer

7.3.1. General considerations concerning the legal basis

355. Pursuant to section 4-6, paragraph one, of the Electronic Communications Act, Nkom may impose an obligation on a provider with significant market power to publish specified information or prepare and publicly disclose reference offers.

“The Authority may order a provider with significant market power to publish specified information or prepare and publish reference offers for electronic communications networks and services. The obligation to publish specified information may inter alia include:

- 1. Financial information*
- 2. Technical specifications, including interfaces used at the network termination points, as well as which standards are used*
- 3. Network characteristics*
- 4. Prices*
- 5. Other terms and conditions for supply and use.”*

356. Pursuant to Section 4-6, paragraph two of the Electronic Communications Act, the Authority may require that offers pursuant to the first paragraph are sufficiently unbundled into individual elements with associated terms based on market needs, so that the user is not bound to accept services, functions or outputs that have not been requested.

357. Pursuant to Section 4-6, paragraph four, the Authority may issue orders concerning where, how and on which terms the information will be made publicly accessible, and also order changes to the offer.

367. Pursuant to Section 4-6, paragraph one of the Electronic Communications Act, Nkom may also specify requirements for the content of the reference offers in advance.

368. With regard to co-location, Section 2-6 of the Electronic Communications Regulation gives authority to order providers with significant market power to publish a number of elements related to the location of equipment.

7.3.2. Assessment of the need for transparency obligations

369. Transparency obligations play an important role in ensuring compliance with other imposed obligations such as the access obligation and non-discrimination obligation. Nkom refers to sections 7.1 and 7.2, in which Telenor is made subject to obligations concerning access and non-discrimination between internal and external provision. As stated above, Section 4-6, paragraph one of the Electronic Communications Act gives authority to order both the publication of specific information and the preparation and publication of a reference offer. Nkom believes that obligations for reference offers are the most relevant transparency obligation in Market 15. For example, as regards access issues, it will help to simplify and speed up negotiations if the key terms for connection follow a reference offer that is publicly available. A requirement for transparency via a reference offer is furthermore appropriate to strengthen confidence that access will be provided on non-discriminatory terms. A requirement for transparency is also appropriate to support Nkom's control of compliance with the obligations concerning access and non-discrimination. Nkom believes that reference offers that are available to external access seekers are necessary in order to make the access obligation and the non-discrimination between internal and external provision requirement sufficiently effective.

370. Nkom furthermore believes that it is sufficient to impose only one form of transparency obligation, which is the requirement to prepare and publish reference offers for the various different access forms. At the present time, Nkom does not see any need to require Telenor to publish specific information beyond what is stated in the reference offers.

7.3.3. General requirements concerning reference offers

371. The point of departure for imposing specific obligations is that Telenor has significant market power and can therefore largely operate independently of the company's competitors and customers. For the regulation to function as intended, it is therefore vital that it remedies the asymmetrical relative strength in the relevant market by facilitating that the access agreements are of a type that would be expected to apply if the market was characterised by competition. This means that, insofar as is possible, the reference offers must balance the interests of Telenor and the access seekers.

372. The content of Telenor's reference offers must reflect an offer of access on the terms and subject to the limitations specified in section 7.1 concerning access, and section 7.2 concerning non-discrimination, for the forms of access that are covered by Telenor's access obligation. The prices in the reference offer must be in line with the requirements specified in section 7.4 Accounting separation and section 7.5 Price and accounting regulation. A reasonable request regarding access must therefore be able to be accommodated with the terms stipulated in the reference offers.

373. The reference offers must reflect all services and products that the access seekers may require at any time, pursuant to the regulation. The products must be included in Telenor's reference offers early enough for access seekers to be able offer the same or equivalent services or products in the retail markets, at the same time as Telenor, cf. the discussion of non-discrimination in section 7.2.3.

374. Nkom is of the view that specific requirements concerning the content of the reference offers will generally be well-suited to streamlining access negotiations and ensure predictability for access seekers. Reference offers must be clear and adequately divided into individual elements with appurtenant terms. In line with Section 4-6, paragraph two of the Electronic Communications Act, the division must fulfil market requirements, so that the other party is not obliged to accept services, functions or benefits that have not been requested. The minimum elements that the reference offers must contain are specified in section 7.3.8.

7.3.4. Publication of reference offers

375. Publication of reference offers is important to making the access obligation more efficient. Publication of the reference offer on Telenor's website is regarded as a satisfactory form of publication, cf. Section 4-6, paragraph four of the Electronic Communications Act. The reference offers must be easily accessible on Telenor's website at any given time.

376. In previous decisions in Market 15, Nkom has concluded that the publication requirement will not cover price information concerning national roaming, MVNO access and service provider access. The main reason for this has been that readily available price information might facilitate tacit collusion in the market. The risk of such collusion particularly applies to markets with few operators. To date, only Telenor and Telia have purchasers of national roaming, MVNO access and service provider access in their networks, with the result that the market is still concentrated on two providers.

377. To reduce the risk of tacit collusion, Nkom still believes that it is appropriate to safeguard the need for transparency for access seekers through means other than the setting of requirements concerning the publication of price information. Thus, operators that request regulated access must, when requested to do so and without undue delay, have access to all relevant price terms.

378. With regard to co-location, Nkom believes that the risk of tacit collusion does not apply in the same way. Co-location is requested at specific locations and there is generally only one potential provider at the relevant location. At the same time, other operators besides Telenor and Telia can offer co-location. Telenor has been publishing its prices on the company's website for many years. Nkom is unable to see that this has had any significant negative effects. Accordingly, Nkom is of the view that the requirement to publish a reference offer for co-location must also include prices.

7.3.5. Submission of reference offers and individual concluded agreements

379. It is important that Nkom is kept updated at all times about applicable contract terms and amendments thereto, among other things, so that Nkom can intervene quickly when required. Nkom therefore believes that there is a need to impose an obligation on Telenor to submit copies of all reference offers, including the reference offer for co-location. In addition, Telenor must submit established agreements concerning national roaming, MVNO access and service provider access.

380. Reference offers (including amendments thereto) must be submitted to Nkom before they come into force. Individual reference offers must be submitted to Nkom without undue delay and no later than two weeks after the signature date.

381. For Nkom to be able to effectively monitor the requirement of non-discriminatory prices and price control pursuant to Section 4-9 of the Electronic Communications Act, it is necessary for Nkom to have an overview of the applicable prices at any time. When agreements are amended, the new prices may enter into force before the agreements have been formally signed by the parties. In such cases, Telenor must inform Nkom of the relevant changes without undue delay and at the latest at the time that the prices come into force. Thereafter, concluded agreements must be submitted to Nkom without undue delay and no later than two weeks after the date of signing.

382. For national roaming, Nkom will not follow up the requirement for non-discriminatory prices until Telenor has received a request for such access and has submitted an offer to a potential access seeker. In light of the obligation to maintain non-discriminatory prices and accounting separation for national roaming, it is important that Nkom is kept informed about the price terms offered by Telenor for national roaming. These must be sent to Nkom without undue delay and no later than two weeks after the offer is made.

383. Reference offers, individual access agreements, information on changes to the agreements, and changes in current prices must be sent by email to firmapost@nkom.no.

7.3.6. Changes to reference offers

384. In the event of amendments to an agreement, it must be clearly stated in an accompanying document to the submission which parts of the agreement have been amended, dates when the agreement was last amended, and what the amendments consist of. Such an obligation will make following up the agreements more efficient, while it cannot be regarded as being particularly burdensome for Telenor.

385. As the reference offers will reflect the products and services that the access seeker will be able to fall back on, it is important that changes that are of significance for the ability of access seekers to compete in the market are not implemented without the involvement of the access seekers concerned. Particularly in the case of major changes in Telenor's existing reference offers, it is important that transparent processes take place which involve and take account of the needs of the access seekers. Telenor must therefore involve the access seeker concerned before implementing such changes by obtaining their views and taking into account their needs. In this context, possible major changes include changes that could materially affect the access seekers' investments and/or choice of business model.

386. At Nkom's request, Telenor must be able to document the process relating to the involvement of access seekers. Telenor must document both that the access seeker has been involved by obtaining their views, and how the company took the access seeker's needs into account in the change process.

7.3.7. Proportionality

387. The publication obligation and reference offer is primarily a continuation of the regulation in the previous decision in Market 15.

388. Nkom believes that the requirements in this decision concerning publication and a reference offer are suitable for achieving the purpose of the regulation. Furthermore, Nkom considers the requirements not to be burdensome in relative terms and that they will entail limited administrative costs for Telenor.

389. In addition, Nkom is of the view that the benefits to competition from setting reference offer requirements for will outweigh the disadvantages such requirements might have for Telenor. Nkom is therefore of the view that it is proportionate to impose an obligation on Telenor to prepare and publish reference offers for regulated access forms.

7.3.8. Special obligations relating to publication and reference offers

390. Nkom refers to the aforementioned assessments concerning which special obligations relating to publication and reference offers must be imposed on Telenor in Market 15. The specific obligations imposed on Telenor ASA (referred to hereinafter in this chapter as Telenor) are stated in this chapter.

391. Pursuant to Section 4-6 of the Electronic Communications Act, Nkom imposes an obligation on Telenor to draw up reference offers for national roaming, access for virtual operators (MVNO

agreement) and access for service providers and co-location in accordance with section 7.1 concerning access, section 7.2 concerning non-discrimination and section 7.3.3 concerning general requirements regarding reference offers. The access prices in the reference offer must furthermore fulfil the requirements stated in section 7.4 concerning accounting separation and section 7.5 concerning price and accounting regulation.

392. The reference offers shall be sufficiently divided into individual elements with appurtenant terms and conditions. Pursuant to Section 4-6, paragraph two of the Electronic Communications Act, the division must satisfy needs in the market so that the other party is not forced to accept services, functions or benefits that are not requested. The agreement must be kept up-to-date and at least contain details of:

- description of the service offered, including indoor coverage;
- general contractual terms and conditions;
- access and any call rates;
- price elements and the services that the individual price elements cover;
- any discounts and criteria for discounts;
- methods used for calculating any offerings without a fixed price,
- geographical supply area,
- any significant capacity limitations on delivery;
- characteristics of a technical and physical nature, including interfaces and the standards that are used;
- agreed quality level;
- maintenance services;
- provisions regarding reasonable compensation for failure to meet the agreed quality level.

393. Pursuant to Section 4-6 of the Electronic Communications Act, Nkom imposes an obligation on Telenor to publish the reference offers, cf. section 7.3.4. It will be sufficient that reference offers for access to national roaming, virtual operators, service providers and co-location are published on Telenor's website. The obligation to publish does not include publication of prices relating to national roaming, MVNO access and service provider access. Providers requesting access will be sent current prices for the relevant access form.

394. Pursuant to Section 10-3 of the Electronic Communications Act, Nkom orders Telenor to send Nkom all reference offers and agreements entered into relating to access and call origination on mobile networks, with the exception of agreements entered into concerning co-location, cf. section 7.3.5. Signed copies of negotiated agreements shall be sent to Nkom without undue delay no later than two weeks after signing. Telenor shall also be obliged to notify Nkom of any changes to such agreements. The notification must clearly state where amendments have been made to the agreement and what these consist of. Notice of changes must be sent to Nkom without undue delay after the changes have been adopted, and no later than two weeks after signing. If the changes enter into force before the agreements have been formally signed, Nkom must be informed of the changes in prices and discounts without undue delay and by no later than the date that these changes enter into force.

395. Price terms offered by Telenor on any request for national roaming must be submitted to Nkom without undue delay and no later than two weeks after the offer has been made, cf. section 7.3.5.

396. Telenor must inform Nkom immediately of any changes in current prices arising on the basis of contractual terms. Copies of agreements, information about changes to agreements that have been entered into and information regarding changes in current prices must be sent by email to firmapost@nkom.no, cf. section 7.3.5.

397. In the event of major changes to Telenor's existing reference offers, including changes that could significantly affect the access seekers' investments and/or choice of business model, Telenor must seek the views of access seekers, involve them in the change process and take account of their needs, cf. section 7.3.5. When ordered to do so by Nkom, Telenor must document that its obligation regarding involvement has been fulfilled.

7.4. Accounting separation

7.4.1. General considerations concerning the legal basis

398. Section 4-8 of the Electronic Communications Act authorises the imposition of accounting separation. The first paragraph reads:

“The Authority may order a provider with significant market power to put in place accounting separation between different business areas or between specified activities related to interconnection and access.”

399. In addition, Section 4-8, paragraph five of the Electronic Communications Act further indicates that the Authority may impose obligations concerning the accounting methods and principles to be applied, while paragraph six stipulates that providers must make accounting information available upon request.

400. As Nkom sees it, the main purpose of accounting separation is to adhere to a requirement for non-discrimination between intra-company activities and external providers. The purpose of accounting separation is to show whether a purchaser of access, with the same volume as Telenor, is able to operate with a positive result, assuming that it operates as efficiently as Telenor.

401. In chapter 5, Nkom identifies price discrimination between internal and external provision as a real and serious competition problem in the relevant market. Accordingly, a requirement for non-discriminatory prices between internal provision and access seekers will be imposed in order to remedy this competition problem, cf. section 7.2.3. Accounting separation will make such an obligation more effective.

7.4.2. Assessment of the need to impose accounting separation for national roaming

402. Nkom believes that accounting separation is a suitable remedy for following up the requirement for non-discrimination regarding price between internal and external provision and for assessing the competitive picture with regard to national roaming.

403. Price discrimination could also be remedied through price control. However, in section 7.5, Nkom explains why price controls for national roaming will cease to be imposed on Telenor. Such an easing of price controls makes requirements for non-discrimination and accounting separation all the more important as a regulatory safety net.

404. Ice is the only purchaser of national roaming. Ice currently has an agreement concerning national roaming in Telia's mobile network. Ice's access agreement with Telia was renegotiated in 2018 and 2020. Ice may need to negotiate a new access agreement with Telenor or Telia during the forthcoming regulation period.

405. Accordingly, Nkom believes that there may be a need for reporting of accounting separation for national roaming in accordance with the principles set out in this decision. However, it is sufficient for Telenor to only report accounting separation as regards national roaming when Telenor receives a request for a national roaming.

7.4.3. Assessment of the need to impose accounting separation for MVNO

406. In section 7.5, Nkom explains that Telenor is subject to price controls in the form of a prohibition against margin squeeze concerning MVNO access. Accounting separation has similarities with a margin squeeze test. However, the margin squeeze test proposed by Nkom will be performed at a lower aggregation level than accounting separation which will cover all of Telenor's products associated with traditional mobile operations. Accounting separation would thus be a supplement to the margin squeeze test imposed for MVNO access.

407. Chapter 3 of the market analysis shows that Telavox is a purchaser of MVNO access in Telenor's mobile network. Two of Telavox's customers are currently served through the MVNO agreement that the company has with Telenor, and there are plans for more customers to be transferred to the MVNO agreement.

408. Accordingly, Nkom believes that there is a need to impose a requirement for the reporting of accounting separation for MVNO access.

7.4.4. Assessment of the need to impose accounting separation for service providers

409. In the decisions of 1 July 2016 and 14 May 2020, Nkom concluded that reporting accounting separation is not very appropriate as a means for following up the terms of access for service providers. Telenor's volumes are used in the reporting of the accounting separation. Telenor offers a broad range of products and is represented in all parts of the market, in contrast to the service providers who offer products that to a great extent are targeted at selected segments in the retail market. As a rule, the service providers also have an even narrower product range than the operators with MVNO access. For example, several of the service providers do not have any offers for businesses.

410. The service providers also have significantly lower volumes than Telenor. The difference in volume and product mix between Telenor and the service providers indicates that accounting separation will not be an appropriate method of monitoring compliance with the requirement for non-discriminatory prices between internal and external operations for this form of access. In addition, Nkom is of the view that the regulation of service provider access should be less extensive than for other forms of access, so that the regulation does not reduce the incentives for investment.

411. Accordingly, Nkom maintains that the requirement to report accounting separation should not include service provider access. Nkom is of the view that the other regulatory requirements that are imposed concerning service provider access are sufficient to remedy the competition problems for this form of access.

7.4.5. Further considerations concerning accounting separation for national roaming and MVNO

412. Accounting separation such as that imposed on Telenor by Nkom in the decision of 14 May 2020 in Market 15 is designed to show the results of Telenor's retail business as if it were organised as an independent entity and had faced the same access prices as purchasers of national roaming and MVNO access from Telenor. Accounting separation covers all revenue invoiced by Telenor to end users of mobile services, and revenue from interconnection to the same end users. Network operator costs, external costs of sales and internal costs related to sales and invoicing, etc. (avoidable costs) are calculated on the basis of Telenor's volume and are deducted from the revenue. The normal rate of return on capital in the retail business is also calculated and deducted in order to calculate the result.

413. The accounting separation gives a comprehensive picture of revenue and costs relating to Telenor's mobile operations. The reporting includes revenue and costs that a mobile operator might have, including revenue and costs that are not directly related to Telenor's regulated access products, such as international roaming and sale of handsets to end users. This is nonetheless revenue associated with traditional mobile telephony, including international roaming in the relevant retail market. As far as possible, revenue and costs must be specified. Each revenue item in the accounting statement must in principle have a corresponding cost item. There are costs associated with selling a product in the retail market and this cost side must be included in the calculation such that the revenue and cost sides correspond when relevant. Detailed and corresponding information about revenue and costs provide an opportunity to isolate the effects of including (or possibly excluding) certain products or services in the accounting statement, and increase the opportunities to analyse the reported figures.

414. Network operator costs are calculated on the basis of Telenor's reference offer for MVNO access. Telenor is required to offer a reference offer, at a variable price for MVNO access; see sections 7.3.8 and 7.5.8. The calculation of the network operator's costs must be based on the reference offer with variable prices. Access agreements with alternative price structures must not be used when calculating network operator costs. In this decision, Nkom discontinues price controls for national roaming. The calculation of costs incurred by a network operator as regards national roaming must therefore be based on the commercial price offered by Telenor following a request for national roaming.

415. Volume discounts are often divided into levels, where the discount increases with increasing volume. As a result, enterprises with high volumes have an advantage over smaller access seekers. In Nkom's decision of 14 May 2020, a volume discount principle was adopted, according to which the discount granted for the access seeker with the lowest volume during the period must be applied.

416. A volume discount that is higher than that used in the decision of 14 May 2020 will entail an advantage for Telenor, as it will be easier to achieve a positive result in the separated accounts. The regulation should also not facilitate inefficient establishment, which indicates that the volume discount in the accounting separation should not be too low. However, the development in market shares shows that access seekers have only taken modest market shares, and it would therefore not be reasonable to assume an excessively high volume discount.

417. As regards MVNO, the handling of discounts is continued by including the discount granted for the access seeker with the lowest volume during the period. If Telenor does not have any access seekers in its network, no volume discount will be used in the reporting. As regards national roaming, the expected or actual discount achieved must be included.

418. As a minimum requirement, the non-discrimination requirement will entail that the reporting must show a positive result. The accounting separation is based on aggregated accounting information for Telenor's entire traditional mobile operation and is therefore not suitable for use in identifying discrimination at a lower aggregation level. However, the margin squeeze test for MVNO will be used to test margins at a lower aggregation level, thus better meeting such needs.

419. A positive result shows the margin for Telenor's retail business as if this was organised as an independent entity and had faced the same access charges as purchasers of national roaming or MVNO access from Telenor. Reporting of accounting separation by Telenor is thus not, as such, suitable for investigating the margins for other operators in the Norwegian mobile market.

420. A negative or very weak result from the accounting separation might indicate that price discrimination between internal and external operations may have occurred. In such cases, Nkom will follow up on the matter and impose adjustment of access prices as required.

421. The changes in the market delineation for this decision, according to which mobile broadband is not part of the relevant retail markets or the relevant wholesale market, must be reflected in the reporting of the accounting separation. This entails revenue and costs associated with mobile broadband no longer being included in the accounting statement.

422. In Nkom's decision of 14 May 2020, traditional M2M services and IoT services in mobile networks were not defined as being part of the relevant retail markets or the relevant wholesale market. This market delimitation also applies to this decision and must be reflected in the reporting of the accounting separation. This entails revenue and costs associated with M2M and IoT communication no longer being included in the accounting statement. However, under the current regulation, Telenor has been required to report additional accounting separation for M2M and NB-IoT. Nkom sees no need to continue such additional reporting on a fixed basis, but may request a corresponding updated calculation as and when necessary.

7.4.6. Proportionality

423. In connection with previous decisions, an exhaustive process has been carried out to determine detailed principles for the preparation of accounting separation, first for MVNO access and then also for national roaming. Well-functioning procedures have been established for reporting accounting separation and both Telenor and Nkom now have extensive experience of this type of accounting reporting. This indicates that, already from the first reporting, the system can be expected to function well as a regulatory safety net in the forthcoming regulation period.

424. In the decision of 14 May 2020, half-yearly and yearly reporting of accounting separation was imposed on Telenor. In Nkom's opinion, reporting of accounting separation at this frequency is no longer necessary, and Nkom is thus simplifying the reporting obligation compared with the previous decision, which required annual reporting. This will reduce Telenor's workload and need to obtain auditor verifications. As Telenor already has a system for reporting accounting separation for both national roaming and MVNO access, the burden of imposing yearly reporting is considered to be relatively limited.

425. For M2M/IoT, reporting will be simplified compared with the previous decision, in that additional reporting will only be requested as and when necessary and not on a regular basis. As Telenor has reported M2M and IoT in separate financial statements since the decision of 14 May 2020, such an obligation is also not considered to be disproportionately burdensome.

426. Nkom also simplifies reporting compared with the previous decision, in that costs and revenues relating to mobile broadband are not included in the reporting.

427. In overall terms, Nkom believes that the benefits for competition of requiring annual reporting of accounting separation for MVNO access and reporting of national roaming upon request clearly outweigh the disadvantages for Telenor, and Nkom considers such an obligation to be proportionate.

7.4.7. Specific obligations related to accounting separation

428. Nkom refers to the aforementioned assessments concerning which specific obligations associated with accounting separation should be imposed on Telenor in Market 15. The specific obligations imposed on Telenor ASA (referred to hereinafter in this chapter as Telenor) are stated in this chapter.

429. Under the authority of Section 4-8, paragraph one of the Electronic Communications Act, Nkom imposes the requirement on Telenor to prepare accounting separation for its mobile operations in Norway, in line with section 7.4.2 and 7.4.5. The accounting separation will provide a basis for monitoring that the prohibition against price discrimination vis-à-vis external purchasers of national roaming is complied with, cf. Section 4-7, paragraph two of the Electronic Communications Act.

430. Under the authority of Section 4-8, paragraph five, of the Electronic Communications Act, Nkom requires Telenor to divide the value chain into wholesale operations and retail operations, and to show Telenor's revenue and costs in the retail operations if Telenor's retail operations had to purchase national roaming from Telenor's wholesale operations at the same prices as external wholesale customers.

431. Under the authority of Section 4-8, paragraph one of the Electronic Communications Act, Nkom requires Telenor to prepare accounting separation for its mobile operations in Norway, in line with sections 7.4.3 and 7.4.5. The accounting separation will provide a basis for the monitoring of compliance with the prohibition of price discrimination with respect to external purchasers of MVNO access in accordance with the reference offer with variable prices; see Section 4-7, paragraph two of the Electronic Communications Act.

432. Under the authority of Section 4-8, paragraph five, of the Electronic Communications Act, Nkom imposes the requirement on Telenor to divide the value chain into wholesale operations and retail operations, and to show Telenor's revenue and costs in the retail operations if Telenor's retail operations had to purchase MVNO access from Telenor's wholesale operations at the same prices as external wholesale customers that use the price structure of the reference offer.

433. Pursuant to Section 4-8, paragraph five of the Electronic Communications Act, Nkom imposes the requirement on Telenor to base the accounting separations on fully distributed, historical costs, on the basis of Telenor's financial accounts and Telenor's prices and volumes for the reporting period. Below are the principles for the preparation of the accounting statements for Telenor's retail operations and the auditing principles:

- **Revenue** will comprise revenue that is invoiced to end users, and revenue from interconnection to the same end users. Revenue from end users and revenue from interconnection must be stated separately. The revenue that is invoiced to the end users must, as a general rule, be obtained directly from the accounts and comprise all relevant services purchased by the end users from Telenor's mobile operations. Detailed information must be provided concerning how revenue from end users is distributed among all significant revenue categories, such as establishment and subscription revenue and traffic revenue. Any other revenue included in the accounting statement must be specified. In the accounting statements, for each revenue item a corresponding cost item must be stated, where relevant. Revenue from interconnection must be based exclusively on Telenor's own interconnection charges. Revenue elements included under other revenues must be specified.
- **Costs for the network operator** must include the costs that Telenor's internal retail operations would have paid to their network operator if an MVNO reference offer or a national roaming reference office had been established between them. The costs of the network operator will be calculated on the basis of Telenor's reference offers with traffic-dependent (variable) prices for MVNO access and national roaming, respectively. The reference offer that is used for the different calculations must be stated. The costs will be calculated by multiplying the volume of voice traffic, SMS and data traffic that is relevant in the various accounting statements, and which is generated from and terminated to the end users, by the applicable charges in the relevant reference offer for MVNO access or national roaming, respectively. The specification of the costs of the network operator must be supplemented with a presentation of the calculation of the costs of data traffic for the period in question. Any operating costs in the current reporting period must be included in the network operator's costs. If there are price changes during the reporting period, the period to which the prices and volumes relate must be stated. If there is a change in the pricing model in the reference offers, the calculation of the access charges must be specified.

When calculating discounts, the reference offers for MVNO access and national roaming must be used as a basis. Furthermore, for each form of access, Telenor may not use higher discount rates than as achieved by the access seeker with the lowest volume during the period reported, unless Telenor is able to document objective reasons for using higher discounts.

- **External cost of sales** must be based on the total cost of sales and traffic costs in Telenor's mobile operations and distributed between the internal retail business (MVNO or national roaming), external MVNOs and service providers, and "Foreigners in Norway" by volume, and included in the accounting statement. External cost of sales also includes interconnection to Telenor's own fixed network operations. All significant items under external cost of sales must be specified. Cost elements included under other costs under external cost of goods must be specified.
- **Internal costs for the retail business** will include all costs incurred by the retail business in order to sell and provide the services to end users. Typical activities/processes will be sales, marketing, customer services, invoicing, operation of service platforms, operation of IT systems and relevant support systems, financial management and management, etc.

The breakdown of costs of the internal retail business must be based on activity-based costing. Remaining costs will be distributed proportionally based on previously assigned costs. The distribution principles for the different cost items that are split between network operations and service provider operations must be described and substantiated.

Since the individual items under costs of retail operations are applied in margin squeeze tests, the greatest possible consistency is required in terms of the classification of costs from one year to another. If changes in the classification of costs have nonetheless been made, between, for example, the network operations and the retail operations, or between cost categories under the costs of the retail operations, Telenor must state this explicitly in conjunction with reporting.

- **Imputed interest cost** must be included in the accounting statement in order to factor in a reasonable return on the investments in the retail operations that are required of an MVNO provider or a provider with a national roaming agreement. Capital tied up in connection with sales, marketing, customer services and invoicing systems must be assigned to the retail business in its entirety. Book capital tied up in connection with service platforms will be distributed between the internal retail business and external service providers according to the number of subscriptions. Capital tied up in connection with equipment that is used by both the network operator and internal retail business will be distributed between them, so that other costs are distributed according to the relevant cost centres. A specification of the basis for calculating the imputed interest must be included in the reporting. Telenor must use the imputed interest rate in accordance with the applicable decision from Nkom at any time concerning the imputed interest rate for the mobile markets.

434. Pursuant to Section 4-8, paragraph one, and Section 10-3 of the Electronic Communications Act, Nkom imposes an obligation on Telenor, upon request, to prepare supplementary reports in which the revenue and costs associated with M2M and IoT are separated. The reporting must adhere to the same principles as for the accounting separation.

435. Pursuant to Section 4-9, paragraph two of the Electronic Communications Act, Nkom imposes an obligation on Telenor to provide sufficient documentation of the accounting separation system for it to be inspected. Among other things, the documentation must include an overview of the cost categories that have been assigned to Telenor's own retail operations in the mobile area. A description of the accounting separation system, including an overview of revenue and cost categories and the allocation keys used, must be published.

436. Pursuant to Section 4-9, paragraph three of the Electronic Communications Act, Nkom imposes a requirement on Telenor to engage an external accountant to perform verification procedures in accordance with ISRS 4400 “Procedures Regarding Agreed Financial Information”. The accountant’s declaration that the accounting statements are in line with the prevailing principles for reporting accounting separation must be attached to each report. The accountant’s declaration in connection with reporting for the full financial year must be submitted to Nkom together with the accounting statements. If the accountant’s verification procedures give a need to change reports already submitted, updated accounting separation reports must be sent to Nkom together with the accountant’s declaration.

437. Telenor must report accounting separation every full-year. Telenor must use distribution keys from the same period as that being reported.

438. The first report in accordance with this decision must cover the full year 2024 and must be submitted to Nkom by 1 July 2025. Annual reports must thereafter be submitted by 1 July each year. The reporting deadlines will apply until Nkom hands down a new decision or withdraws the regulation in the relevant market. If Telenor receives a request for national roaming during the decision period, this form of access must be reported on the first reporting date after the offer has been given. If Telenor then enters into an agreement, the same reporting intervals and deadlines as stated above will apply.

7.5. Price and accounting controls

7.5.1. Assessment of the need for price controls concerning access to national roaming, MVNO access and service provider access

439. Pursuant to Section 4.9 of the Electronic Communications Act, a provider with significant market power may be made subject to price obligations, including regulated rates for access. Such obligations may be imposed if the provider can leverage its market position to the detriment of end-users in the market by maintaining disproportionately high price levels or by establishing margin squeezes for competing providers. It is evident from the preparatory work on the Electronic Communications Act that there is a reverse burden of proof⁶² for a provider that is subject to price controls pursuant to Section 4.9. It also states that price controls authorise repayment when an illegal high price has been proven.

440. Chapter 5 states that price discrimination, overpricing and margin squeezes are real and serious competition problems that largely relate to the leveraging of market power. Vertically integrated enterprises with a strong market position can transfer market power from the wholesale level to the end-user level by increasing the costs for competitors in the end-user markets. By setting higher access prices for external access seekers than the actual or implicit prices that apply internally within the enterprise, the external parties will have a disadvantage in the price competition at end-user level. External access seekers can thus experience a margin squeeze due to the excessively high access price.

441. In connection with the previous two decisions, the observed competition problems were decisive in leading Nkom to conclude that regulated access rates were required. Price controls were considered suitable for improving competition in the market, particularly in a situation where Nkom does not have the same information base as Telenor. Telenor’s price obligations were designed as a

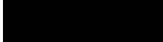
⁶² In this instance, a reversed burden of proof means that the party that is subject to price controls has the best possibility of securing evidence of its compliance, or possibly to document innocence in relation to claims of a breach of the regulations and is therefore assigned the burden of proof.

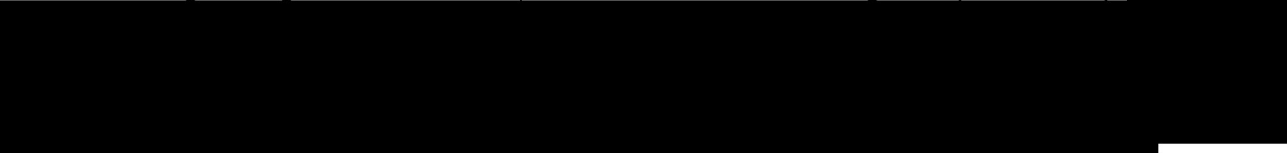
requirement to offer access at prices that prevent the access seeker from being placed in a margin squeeze. The obligation applied to all forms of access.

442. Nkom believes that the competition problems in the market are still prominent. The lessons learned from seven rounds of margin squeeze tests in accordance with Nkom's decision of 14 May 2020 have shown that there is a need to regularly investigate whether Telenor is complying with the requirement regarding access prices. Telenor implements price reductions in its reference offers, often in conjunction with the timing of margin squeeze tests. Nkom therefore believes that there is still a need for price controls in some areas.

443. As regards national roaming, Nkom signalled in its decision of 14 May 2020 that price controls should, as a clear general rule, be limited to the lifetime of the decision in question. This was to provide incentives for development during the regulatory period. Through the price controls, Ice was given the opportunity to obtain favourable prices for access in the form of linear prices based on a prohibition against margin squeeze, but with what is known as a "sunset clause", which meant that the price controls would not be permanent.

444. During the eight years that have passed since Ice took over parts of the infrastructure from Tele2 (2015) and began its development of mobile networks for offering telephony-connected services, the company has built up a network with around 96 percent population coverage. Over 90 percent of the company's data traffic passes through Ice's own network, and the development project that is currently under way aims to achieve nationwide 5G coverage within a few years. The scope of the access purchase will thus be relatively limited and decreasing over the coming years. Nkom therefore believes that the financial risk for Ice as a result of the phasing-out of price controls is limited.

445. Through the agreement with Telia, Ice also has a reasonable degree of predictability. 



446. Accordingly, Nkom believes that the considerations relating to regulatory predictability, incentives for efficient development and limited financial risk indicates that price controls for national roaming should be discontinued. Nkom therefore maintains its decision that price controls for national roaming will end when this decision enters into force. No further price controls can be expected for access to national roaming thereafter.

447. However, for MVNO access and service providers, the market situation is virtually unchanged from the previous decision, and Nkom believes that there is a need to continue price controls in this regard.

448. Nkom has also previously noted that the access conditions, which are largely determined by margin squeeze tests performed on a portfolio of Telenor products, could sometimes cause access prices for service providers to be more attractive than the corresponding prices for MVNO. This is a situation that could damage the investment incentives of operators who are climbing the investment ladder. In its decision of 14 May 2020, Nkom therefore introduced requirements regarding the relative price levels between the various forms of access. Nkom believes there is a need to continue such a requirement between MVNO and service provider access.

449. Experience gained from previous decisions has also indicated that there is a need to stipulate requirements regarding price structure, in addition to price levels, to ensure that price controls are effective and have the intended effect. The price obligations in this decision are thus supplemented by specific price structure requirements.

7.5.2. Selection of method of price control concerning access to national roaming, MVNO access and service provider access

450. The starting point for selecting the price control method is the principles described in chapter 6. Nkom concludes that control as a general principle should facilitate infrastructure investments, i.e. facilitate dynamic efficiency. At the same time, the interests of consumers must be promoted by making the best possible use of existing infrastructure towards achieving the goal of infrastructure competition.

451. In its strictest form, price controls in the form of cost-oriented prices will entail that the access is priced at a level that corresponds to Telenor's long-term marginal costs, and such price control will thereby support the competition for services and facilitate low prices for end-users. This price control could also reduce the third network's incentives for further investment in infrastructure, if the purchase of access to existing networks is relatively more attractive than building one's own. In the longer term, access prices down towards marginal costs could also be unfortunate for the third network's opportunities and incentive to themselves offer wholesale access. However, reduced retail prices are a desired effect of price controls at wholesale level. At the same time, the pressure in the retail market must not be so great as to impede Ice's opportunities to compete in the retail market in a phase where the company relies on building up a customer base, thereby weakening the company's economic strength for investment in the network.

452. An opposite extreme, in the form of very modest or no price controls, would result in insufficient consideration being given to other access seekers. Nkom assumes that the price obligations must balance the consideration of facilitating that external operators can compete on established infrastructure and contribute to price competition in the retail market, while ensuring that an opportunity space is created for the third network to compete in both the wholesale market and the retail market.

453. The competition for services can be safeguarded by ensuring that efficient access seekers can profitably replicate services that are offered by Telenor through their own retail activity. This type of control would thereby probably entail that the access prices are higher than when cost-orientation is required. Nkom also expects that the retail prices will decline for some time as a consequence of how the control facilitates the market's movement towards the goal of sustainable competition, cf. the aforementioned reference to dynamic efficiency. On behalf of the Ministry of Local Government and Regional Development, Tefficient has conducted a comparison of Nordic mobile phone prices⁶³, which indicates that price differences with respect to our neighbouring countries have decreased during the past year. In particular, the prices of mobile subscriptions with large data packages have become cheaper.

454. On the basis of the aforementioned assessments, Nkom believes that it is not currently appropriate to impose price control in the form of cost orientation for MVNO or service provider access. On the other hand, price control in the form of prohibition of margin squeeze is still assessed to be an appropriate form of price control that can help to mitigate the competition problems identified. Any such requirement entails that Telenor must offer access to external providers at a price that enables access seekers to replicate Telenor's products in the retail market and achieve positive margins⁶⁴. In the light of the current market situation, Nkom believes that this requirement is best suited to remedy the competition problems, balance the consideration of facilitating infrastructure competition against the need for competition for services, ensure compliance and enable an effective follow-up of the access obligation. The selected design of price control thereby seeks to safeguard the

⁶³ [analysis-of-norwegian-mobile-revenue-data-usage-and-pricing-by-tefficient-for-kdd-26-sep-2023.pdf \(regjeringen.no\)](#)

⁶⁴ Margins can be measured as a gross margin or according to a full margin squeeze test.

purpose of facilitating infrastructure competition while also incentivising the competition for services by using the existing infrastructure.

455. Nkom's decision of 1 July 2016 explains that the principle of "adjusted EEO"⁶⁵ is appropriate to support the instrument that will remedy the competition problems identified. Nkom believes that the assessments concerning this issue remain valid. The principle of adjusted EEO is therefore continued in the upcoming control period. The practical implications of this appear in the enclosed principles for margin squeeze tests. Telenor is in a unique situation concerning scale and scope advantages and it would not be in line with the objective of the controls to apply an efficiency requirement that presupposes that all operators in the market have the same advantages as Telenor. The controls imposed on Telenor have the objective of creating sustainable competition and the relationship to dynamic efficiency will therefore be of vital importance. This entails that, in the short term, it can be accepted that there are deviations from requirements regarding static efficiency, since a potential loss of efficiency will be absorbed by efficiency gains over a longer-term perspective.

456. Accordingly, Nkom finds that Telenor's access prices should be such that purchasers of MVNO access and service provider access are not subjected to margin squeeze. This means that it should be possible for an access seeker to replicate Telenor's representative⁶⁶ retail products⁶⁷ relating to telephony-connected mobile services with a positive margin.

7.5.3. Differentiated margin squeeze regulation

457. To ensure compliance with the margin squeeze prohibition, margin squeeze tests can be performed. Margins can be tested as a gross margin or by using a full margin squeeze test. Gross margin means relevant revenues from end-user operations, including termination revenues related to the relevant end users, less access costs and termination costs⁶⁸. A full margin squeeze test also takes costs in the retail business into consideration.

458. Different access seekers who use the various forms of access will typically organise themselves in different ways in the retail market. They also have different investment needs, and they have different needs in terms of purchase of access. The margin squeeze regulation is intended to prevent Telenor's pricing of the various access forms from maintaining the competition problems. Nkom is therefore of the view that it is appropriate to differentiate the regulation of various forms of access. The margin squeeze tests assume reference operators based on efficiency assessments, as described below and in the principles in Appendix 2. In this way, account is taken of the facilitation of competition for infrastructure and services, but without stimulating inefficient establishment.

459. With regard to providers with MVNO access, they can be considered to lie a step lower on the investment ladder than national roaming, since such operators do not invest in radio networks. MVNO access will normally be requested as a fully nationwide service. Experience shows that an MVNO will target selected parts of the total retail market. Nkom assumes that an efficient MVNO is targeted towards either the overall residential market or the overall business market.

460. Agreements concerning MVNO access must pass the full margin squeeze test. Based on the aforementioned efficiency assessments, agreements concerning MVNO access are tested together for the residential markets and together for the business markets. Under the regulation following the decision from May 2020, mobile broadband and ordinary mobile subscriptions were tested collectively in the margin squeeze test for MVNO. As mobile broadband is no longer covered by the regulation, cf.

⁶⁵ EEO is an abbreviation for "Equally Efficient Operator".

⁶⁶ Product selection is laid down in adopted principles, cf. Appendix 2.

⁶⁷ Retail products are equivalent to subscriptions. When referring to voice, SMS and data, the term 'services' is used.

⁶⁸ Termination revenue and costs will not normally be incurred for a service provider.

chapter 2 of the market analysis, revenues and costs for this business area will not be covered by the margin squeeze test.

461. An operator with a service provider agreement purchases a processed product for resale and has a more modest need to make its own investments. In the same way as MVNO access, service provider access will be in demand as a nationwide service. In contrast to providers using the other forms of access, a service provider will not be able to leverage opportunities that exist in producing via their own infrastructure to a partial extent. A service provider may also have a somewhat lower threshold for entering the market by being targeted towards a limited part of the residential or business markets. Nkom therefore assumes that an efficient service provider is geared towards offering products in limited parts of the retail market.

462. Service provider access agreements must consist of a positive gross margin requirement for each individual retail product included in the test. Nkom believes that such a test, combined with other requirements regarding the agreement terms arising from this decision, will be both necessary and sufficient to safeguard the opportunities for this group of access seekers to compete in the relevant retail markets.

463. By conducting differentiated margin squeeze tests, the control is intended to ensure that providers with an agreement concerning MVNO access are not excluded from any of the defined retail markets, and that access seekers with service provider agreements are not excluded from any niches of the retail markets.

7.5.4. Requirements regarding relative price levels between different forms of access

464. As an operator with significant market power, Telenor may have incentives to seek to limit competition from certain operators that could potentially pose a greater threat to its own retail business than others. As a result, access seekers at the lower levels of the investment ladder, i.e. providers that can be considered to represent less of a long-term competitive threat, could be offered more attractive terms than other access seekers. In previous regulatory periods, Nkom has observed that the access conditions have sometimes been more favourable for service provider access than for MVNO access. Such a situation is unfortunate with regard to investment incentives and could adversely affect the goal of sustainable competition.

465. Nkom therefore requires Telenor not to set access prices that are less attractive for MVNO access than for service provider access. This means that prices for mobile data access should not be higher for MVNO access than for service provider access. As an MVNO must pay for access to both origination and termination of voice and text messaging, the MVNO prices for these services must not be higher than half of the service provider prices.

466. Today, Telenor's reference agreements include discounts that increase with the traded volume. In line with the requirement concerning the relative price level between access forms, the discount scale may not be more attractive for one access form compared to access forms higher on the investment ladder.

467. The requirement regarding relative prices does not apply to access agreements with alternative price structures as described in section 7.5.8.

7.5.5. Full margin squeeze tests for MVNO access

7.5.5.1. Introduction

468. Nkom has developed principles for the margin squeeze test in Market 15⁶⁹ for performing a margin squeeze test that is well-suited for following up the prohibition on margin squeezing. These principles will form the basis for a specific margin squeeze model.

469. Nkom has further developed the margin squeeze model from the previous control period, so it is well-suited for the specific tests. A margin squeeze model will depend on the use of information from multiple sources and will strive to be specifically adapted to the current structures for access agreements and updated accounting and traffic information. If the structure of this information changes during the regulation period, it is not ruled out that the model may be adjusted. However, this does not imply a change to the regulatory obligations.

7.5.5.2. Products included in the tests

470. The margin squeeze tests for MVNO-access must be conducted based on Telenor's products⁷⁰ in a way that ensures sufficient scope and the inclusion of representative products. Against this backdrop, Nkom has assessed whether it would be more appropriate to test for all of Telenor's products, products that are for sale or a representative range of products. Based on the current competitive situation in the retail markets and a knowledge of Telenor's subscription distribution, Nkom has concluded that it would be appropriate to test a representative sample. As a starting point, Nkom will test products that cumulatively account for around 70 per cent of the number of subscriptions in each of the retail markets that are subject to margin squeeze testing. In addition, products that account for at least 10 per cent of the number of subscriptions in the relevant retail markets will generally be regarded as representative. The shares are calculated on the basis of the subscription distributions at some point in time close to the test. In Nkom's opinion, such a representative sample of products will provide a relevant picture of the competition situation. By limiting the scope in this way, the burden on Telenor is reduced with regard to data acquisition.

7.5.5.3. Efficiency requirements in margin squeeze tests

471. In the margin squeeze test, an effective reference operator is defined based on market share. In the decision of 14 May 2020, Nkom used a market share of 3 per cent as a basis for conducting a margin squeeze test for MVNO. Nkom was of the opinion that a higher market share would not reflect the operators in the market, and would thus not sufficiently remedy competition problems and promote new establishment.

472. The company Telavox AS⁷¹ is Telenor's access seeker that represents the most customers. Their wholesale customers made up around 6 per cent of the total number of subscriptions for mobile-connected services at the end of the first half of 2023. The company is in the process of moving some of its wholesale customers across from a service provider platform to MVNO. Nortel is Telavox's largest access seeker, with a market share of 3.7 per cent in the business market. Nortel has experienced relatively rapid growth and has been successful with its venture in this market. Other MVNOs in the Norwegian market are Lycamobile and Com4. The latter has a retail business geared towards the M2M market, while Lyca offers telephony-connected services. Lyca's market share of the residential market was around 1.4 per cent at the end of the first half of 2023. In Nkom's view, the fact that some operators have managed to achieve a market share of more than 3 per cent is positive for the

⁶⁹ Appendix 2: Principles for margin squeeze tests in Market 15.

⁷⁰ Products from Telenor's internal brands. At the time of the decision, these brands are Telenor and Talkmore.

⁷¹ Telavox is a contractual party with Telenor, a facilitator and a reseller to providers that have end-user offerings.

competitive situation in the retail markets, but does not in itself constitute a reason for increasing the requirement for efficiency in the margin squeeze test.

473. Market development in Norway has shown that access seekers face significant challenges in gaining large market shares. Regulation should be designed to facilitate efficient providers which start without a significant market share. Nkom therefore believes that the requirement for efficiency when testing price terms for MVNO access should be retained at the same level as under the current regulation. This is also appropriate with regard to regulatory predictability. Nkom therefore requires a market share of 3 per cent in the business market and a market share of 3 per cent in the retail market in the margin squeeze test for MVNO.

7.5.5.4. Conclusion

474. Telenor has been required to offer MVNO access on price terms that prevent access seekers being placed in a margin squeeze. The access agreement that satisfies the requirement for traffic-dependent (variable) rates must be applied, cf. section 7.5.8. The obligation not to put the access seeker in a margin squeeze has been fulfilled if Telenor's reference offer with variable prices gives positive margins. The obligation is followed up using tests that follow the above principles⁷² and are designed as follows:

- Testing of an operator that purchases standard MVNO access from Telenor. The operator has 3 per cent of the retail market for telephony-connected mobile services, and collectively replicates Telenor's representative products in this market.
- Testing of an operator that purchases standard MVNO access from Telenor. The operator has a 3 per cent share of the business market for telephony-connected mobile services, and collectively replicates Telenor's representative products in this market.

7.5.6. Further considerations concerning the gross margin test for service provider access

475. The gross margin test for service provider terms involves a test of whether each of the representative products included in the MVNO tests have a positive gross margin. This entails a requirement that revenues from each retail product must exceed the relevant access cost. Representative products for the gross margin squeeze test will thus coincide with representative products for the MVNO tests for both the residential market and the business market.

476. A gross margin squeeze test of the terms of service provider access implies that no product can be offered in the end-user market with prices lower than that of an access seeker having to pay Telenor to offer the corresponding product. However, an aggregated or full margin squeeze test will accept products with negative gross margin, as long as the total margin exceeds zero.

477. Service providers are geared towards a smaller portion of the end-user market and are more reliant on being able to replicate individual products with a minimum positive gross margin. Positive gross margin requirements for all products included in the test are thus deemed suitable for operators who target their end-user offers to a defined and limited part of the markets.

478. However, the positive gross margin requirement still imposes requirements for service providers, who have a limited product portfolio, to operate their end-user business very efficiently, for example by leveraging established distribution channels and existing customer groups. However, establishing oneself as a service provider requires relatively limited investments, and in the event of withdrawal from the market, acquired customer base can be sold. Nkom therefore believes that a positive gross margin requirement constitutes an adequate safety net for this form of access.

⁷² Cf. also Annex 2, Principles for margin squeeze tests

479. As regards market share assumptions, Nkom refers to the fact that service providers have significantly lower market share than Telenor. In the decision of 14 May 2020, the market share for testing service providers was set to 3 per cent. Among the access seekers which have their own retail offerings, Fjordkraft has experienced the strongest growth in the retail market. The company had achieved a 3.18 per cent market share in the residential market at the end of 2022. Nkom believes that equal treatment with MVNO is proportionate. The need for regulatory predictability is also an argument for continuing the current requirement for a 3 per cent market share for testing service provider access.

480. Telenor offers relatively few retail products in the business market compared with the residential market. Over time, Nkom has obtained information from Telenor to gain a better insight into how business agreements are formulated, as well as a better insight into the various business products. Nkom is concerned that testing the gross margin for a product in the business market that is used by a highly diversified customer portfolio can be less reliable. Nkom has therefore assessed whether the requirement for a positive gross margin in the business market should be set at a less aggregated level than individual products, cf. Annex 2, section 3.1.6.

481. The product "Bedrift Total" is by far Telenor's largest retail product in the business market. The number of subscriptions to this calling plan has increased in recent years, and as of 1 March 2023, "Bedrift Total" accounted for around [REDACTED] of Telenor's total number of subscriptions in the business market. Small, medium and large business customers all had the "Bedrift Total" calling plan at this time. According to Telenor, the product is offered to customers at individually agreed prices, with voice and SMS included in the monthly price. Information received from Telenor, as well as additional tests performed by Nkom, indicate that the various business agreements under the "Bedrift Total" calling plan have very different prices and margins.

482. If gross margin is tested collectively for a very high proportion of Telenor's customer base in the business market, there is a risk that the margin may be negative in certain parts of the market without this being apparent. In turn, this may result in purchasers of service provider access being excluded from certain parts of the business market, and undermine the purpose of price controls concerning service provider access.

483. Against this backdrop, Nkom has concluded that it is both necessary and proportionate to divide "Bedrift Total" into smaller segments. Based on, inter alia, Statistics Norway's categorisation of businesses in Norway and information from Telenor regarding the product, Nkom has concluded that "Bedrift Total" should be divided into seven segments based on the number of subscriptions per business customer: cf. Annex 2, section 3.1.6. Each of the seven segments will be tested as standalone products with a positive gross margin requirement.

484. Telenor has subsequently been required to offer service provider access on price terms that prevent the purchaser of access from being placed in a marginal squeeze. The access agreement that satisfies requirements for traffic-dependent prices shall be applied, cf. section 7.5.8. The obligation is monitored by a gross margin test. The obligation not to put the access seeker in a margin squeeze has been fulfilled if Telenor's reference offer with variable prices gives positive margins. The test shall be conducted in accordance with the principles above, cf. also Appendix 2, and using Nkom's margin squeeze model. The test is designed as follows:

- Testing of an operator that purchases standard service provider access from Telenor. The operator has a 3 per cent share of the retail market for telephony-connected mobile services and replicates each of Telenor's representative products in this market.
- Testing of an operator that purchases standard service provider access from Telenor. The operator has a 3 per cent share of the business market for telephony-connected mobile

services, and replicates each of Telenor's representative products in this market, as well as the seven segments of the "Bedrift Total" product.

7.5.7. Further considerations regarding the follow-up of price controls

7.5.7.1. Frequency of the tests

485. In order to oversee compliance of the prohibition against margin squeeze, Nkom will conduct margin squeeze tests and gross margin tests on a regular basis. When assessing the frequency with which tests should be performed, Nkom believes that it is necessary to verify that, at all times, prices meet the requirement for Telenor's access seekers not to be subjected to a margin squeeze. At the same time, the assessment takes into consideration that the implementation of the margin squeeze test entails a substantial administrative burden for both Telenor and Nkom. Nkom finds it appropriate to specify what is normal for how frequently the margin squeeze tests will be carried out, and at the same time what conditions (trigger points) Nkom will take into account when assessing whether to conduct tests in addition to this.

486. As a general rule, Nkom will carry out full margin squeeze tests and gross margin tests at six-month intervals and will obtain relevant information in advance from Telenor and any other providers, cf. Section 10.3 of the Electronic Communications Act concerning disclosure obligations. Relevant information must normally be reported to Nkom on 1 April and 1 October each year, covering the periods from September to February and March to August respectively. The tests will be performed as soon as possible after the requested information has been received, and normally within 30 days. Nkom will process the results without undue delay based on general principles pertaining to processing. Nkom assumes that the assessment of the results arising from the full margin squeeze tests and gross margin tests might normally be completed within the time frames stipulated in Section 11.2 of the Electronic Communications Act.

487. As mentioned above, there may be situations where it is necessary to conduct tests beyond what we have referred to above as the general rule. This could be in cases where, for example, wholesale prices are amended or if new wholesaler products are introduced. If access seekers or other stakeholders present justified arguments for significant market changes, including prices, costs or customer distribution, which have an impact on the outcome of the tests, it will also be relevant to perform margin squeeze tests over and above the established form. For the sake of clarity, we note that the examples of trigger points for when it may be required or necessary to conduct tests outside the stated schedule are not exhaustive.

488. Nkom clarifies that the obligation to offer access rates that prevent margin squeeze is ongoing. By utilizing the margin squeeze model, Telenor has the ability to calculate the margin on their own products themselves and with given access rates, so that the company can predict which prices will in future periods comply with the controls, including in light of the expected growth in the use of mobile data.

7.5.7.2. Correction of wholesale prices

489. Nkom believes that, in order for the margin squeeze controls to efficiently promote the purpose of the controls, it is important for the operators involved to achieve transparency and predictability. It is therefore necessary that the controls sufficiently clarify in advance how a breach of the margin squeeze controls will be dealt with. A margin squeeze test is passed if the end-user revenue is greater than or equal to the sum of the wholesale costs and downstream costs. Whether there is a margin squeeze will therefore depend on the relative relationship between revenues and costs in the margin squeeze model. It is thus necessary to decide what prices Telenor should be able to adjust if the

margin squeeze tests are not passed. Specifically, the question is whether Telenor is to be granted the right to increase the end-user prices to remedy an identified margin squeeze.

490. Nkom's choice of margin squeeze test as a price control instrument builds on an overall assessment of a number of conditions, including that the obligations shall promote the purposes of the controls. In its evaluation of the price adjustment method, cf. section 7.5.2, Nkom explains that cost orientation is an option for price control. However, Nkom concludes that the prohibition of margin squeeze is a suitable approach in this market. The room for action that Telenor should have in order to remedy an identified breach of requirements in the margin squeeze controls, is a significant element of Nkom's assessment of whether margin squeeze control will work efficiently enough as a price control instrument.

491. In the market analysis, Nkom has shown that Telenor has a stable and high market share over time. Telenor therefore has a controlling influence on the end-user markets. Nkom believes that if Telenor is allowed to correct violations in the margin squeeze test by increasing the end-user prices, this will not remedy the underlying competition problem in the wholesale market. According to Nkom's assessment, the need for the handling of any breach of the requirements of the margin squeeze controls to remedy competition problems in the wholesale market, suggest that Telenor should be required to remedy a margin squeeze by reducing wholesaler prices.

492. In Appendix 2, Nkom has justified the choice of representative products and the aggregation level that will be the basis for the margin squeeze tests. If the margin squeeze tests show that the requirements of the controls are not met, it is important that this situation can be remedied efficiently. In such a situation, if Telenor is to be able to fulfil the requirement to pass the margin squeeze test by increasing the end-user prices, such a remedy will only be effective by increasing the end-user prices on one or more of the products covered by the margin squeeze test. Within the products covered by the test, there will be a segment of end-users who are in a contractual period with an agreed price. Furthermore, Section 2.4 of the Electronic Communications Act requires that a change to or termination of an agreement to purchase electronic communications services cannot come into force until one month after notification has been sent to the end-user. The provision also grants end-users who do not accept the new terms and conditions the right to terminate the contract at no additional charge. Overall, Nkom believes that these conditions tend to suggest that allowing Telenor to remedy the situation by increasing the end-user prices, will not provide sufficiently effective price controls.

493. The margin squeeze control of Telenor entails that Nkom periodically conducts a margin squeeze test. The test is carried out at the end of each period and thus has a limited retrospective perspective. A more invasive form of margin squeeze control is to impose demands that the margin squeeze test should be passed before end-user products can be offered in the market. If the regulator finds in such a margin squeeze test, that the margin requirement in question is not fulfilled, there are no end-users who will be directly affected if the controlled provider is allowed to increase the end-user prices in order to remedy the margin squeeze situation. However, this does not apply to margin squeeze testing of products that end-users have already entered into an agreement to purchase. Nkom considers that consideration of the end-users suggest that Telenor should not be granted the right to increase the end-user prices to remedy an identified margin squeeze.

494. Based on the above, Nkom believes that allowing Telenor to increase the end-user prices in order to remedy an identified margin squeeze, would not normally be a sufficiently good alternative to demanding that Telenor, in the event of an identified breach of the margin squeeze controls, must reduce their wholesale prices.

495. Requiring that an identified margin squeeze must be remedied by reducing wholesale prices involves a restriction of Telenor's freedom of action. Nkom believes, however, that such a restriction is necessary so that the margin squeeze controls can adequately promote the purpose of the controls, namely to remedy identified competition problems, and thereby be a suitable form of price control.

Nkom cannot see that the purpose of the regulation can be achieved in any less intrusive way. The alternative would be to impose a different and more invasive form of price control. Nkom concludes on this basis that it is proportionate to require Telenor to reduce its wholesale prices in the event of a breach of the margin squeeze controls.

496. If the margin squeeze and/or gross margin tests are not passed, i.e. that they do not give a positive result, Nkom will normally require Telenor, pursuant to Section 10.6 of the Electronic Communications Act, to correct the company's wholesale prices for access to a level necessary to ensure that the margin squeeze tests show a positive result.

7.5.7.3. Correcting prices for voice, SMS and data

497. The portfolio approach when conducting a margin squeeze test means that an imposed reduction in wholesale prices could be distributed across multiple access products. Access to voice, SMS and mobile data are the most important services included in the access obligation for all relevant forms of access. The access price for the three aforementioned services is therefore of vital importance for the competitiveness of the access seekers. A standard access agreement based on the reference offer may contain substantially more products than those mentioned, including costs related to SIM cards and twin cards, international calls, content services, implementation of number sequences and the like.

498. One problem is then whether Telenor is to be given the freedom to choose how to allocate the reduction between different access products that are included in the margin squeeze test. A key element behind the choice of the portfolio approach is that the margin squeeze controls will ensure some flexibility for Telenor with regard to the pricing of various end-user products. In the event of an identified breach of the margin squeeze controls, Nkom believes that this consideration cannot be emphasized equally. Nkom therefore refers to the assessment above, where we state that Telenor will be required to reduce its wholesale prices to a level that ensures a positive margin in the margin squeeze tests. Considering that price controls are intended to remedy overprice and price discrimination, the price controls must have an effect on the core products in the relevant markets. If the tests are not passed, Telenor will be required to make changes to the prices for voice, SMS or mobile data, or a combination thereof.

499. Based on the above assessments, Nkom has decided that if the margin squeeze tests are not passed, i.e. do not produce a positive result, Nkom will require rectification of Telenor's access prices, cf. Section 10.6 of the Electronic Communications Act. The order is clarified so that Telenor must make changes limited to the price for either voice, SMS or mobile data. This means that when Telenor is ordered to make a correction, it can choose to change the price for voice, SMS or mobile data, or a combination of the prices for these three services.

500. Access prices must be reduced to a correct level as quickly as possible, since high access prices reduce the ability of the access seeker to compete in the end-user market. At the same time, Telenor should have some time to assess how the company will comply with the decision, including the application of the reduction of wholesale prices. Nkom has assessed it to be reasonable that the wholesale prices must normally be rectified within ten business days from the rectification decision being made.

7.5.7.4. Refunds

501. If the margin squeeze test is not passed, Nkom will instruct Telenor to correct the access prices to a level that entails that the requirement not to put access seekers in a margin squeeze is fulfilled. Such an order for rectification will only be effective forward in time.

502. It follows from Section 10.12 of the Electronic Communications Act that a provider who has paid too high a price in relation to the price obligation that is imposed on Telenor through this decision may claim the overcharge refunded. At the request of the entitled party, Nkom will specifically assess in each case whether an individual decision should be made on the refund of the excessive price. The most important criteria in the assessment are the size of the excessive price and whether too low a price has been taken in a previous period. The Act does not specify any formal lower limits for when Nkom may order the excess price paid to be reimbursed.

503. A refund decision involves a subsequent settlement between the parties. The provision is objective, and questions of guilt are therefore not part of the assessment to be made by Nkom. In the notes on the provision, any difficulties in determining the amounts paid that have certainly been excessive, and whether the price paid was too high, are mentioned as elements in assessing whether a refund should be imposed. Nkom believes that these factors would normally be considered to have limited significance in an assessment of a refund pursuant to the price obligation imposed on Telenor in this decision. Nkom refers, among other things, to the fact that Telenor has access to the model and knows the different values used to assess whether there is a margin squeeze.

504. In order to calculate the size of the repayment amount, Nkom will have to consider for which period an excessive price has been charged, and how high the excessive price has been during this period.

505. Normally, Nkom gathers information for the periodic margin squeeze tests twice each year. The information will have a six-month retrospective perspective. If there have been no changes to the access prices during the period since the end of this six-month period and through until the rectification order is issued, Nkom believes that it can normally be assumed that the margin squeeze situation has existed since the end of the six-month period. Restitution of such excessive prices could occur, according to the Electronic Communications Act, based on a refund requirement.

506. If Telenor reduces the access price after the end of the six-month period and the reduction is limited to what is necessary to remedy a margin squeeze situation, then Nkom believes it can normally be accepted that the margin squeeze situation existed during the period from the end of the six-month period until the price reduction came into effect. Restitution of such excessive prices could also occur, according to the Electronic Communications Act, based on a refund requirement. If Telenor reduces the access price after the end of the six-month period, Nkom will also disclose results based on the previous price when Nkom publishes results from the margin squeeze tests based on current access prices.

507. In the event of a claim for reimbursement in the situations described above, Nkom will assess the amount of the reimbursement claim by looking at the actual change in the access price, as well as the volume purchased by the access seeker relating to the relevant service(s) during the relevant period.

508. It may be necessary to assess whether margin squeeze has also occurred during the six-month period in light of supplementary information from previous periods.

7.5.8. Requirements regarding price structure

7.5.8.1. Introduction

509. In section 7.2 above, Telenor is made subject to a requirement for non-discrimination between internal and external provision. Among other things, the requirement for non-discrimination between internal and external provision means that, as far as possible, the access that Telenor offers to access seekers must afford the same opportunities and flexibility to design retail products as those open to Telenor's own retail business. As a vertically integrated operator with its own mobile network, Telenor

has complete flexibility to design its retail products with regard to price, price structure and other conditions. The requirement for non-discrimination entails that Telenor's wholesale offerings may not have a price structure that favours, prevents or restricts the opportunities open to access seekers to compete in the retail market, and thereby favours its own business. Non-discrimination also means that access seekers must be able to obtain an offer of access to Telenor's mobile network with a price structure that has no anti-establishment or exclusionary effect.

510. To enable access seekers to compete on equal terms with Telenor's retail business, Nkom believes that price obligations that are aimed at price levels must be supplemented with requirements regarding price structure in order for the price obligations to be sufficiently effective.

7.5.8.2. Requirement for a price structure without a fixed fee per subscription for all forms of access

511. In the decision of 1 July 2016, Nkom required Telenor to offer a price structure at wholesale level without a fixed-price component at subscription level, known as 'variable price'. Prior to the decision, all of Telenor's access agreements had a price structure consisting of relatively high fixed-price components at subscription level, and traffic-dependent prices for use. The fixed-price component entailed a fixed monthly charge per SIM⁷³, irrespective of traffic volumes during 30- or 90-day periods. Access to different data speeds (speed classes) entailed additional charges (fixed price) per SIM.

512. Nkom continued the obligation to offer variable pricing in its decision of 14 May 2020.

513. The reason for the obligation regarding variable prices was that the payment obligation was to be linked to the access seeker's use of the network, as it is the volume of traffic flows that occupies capacity, and not the number of end users with access to mobile networks/subscriptions. Users of the mobile network move around, using multiple base stations, and have no exclusive access to use the network from where they are located. On this basis, Nkom believed that Telenor should not be able to require the SIM fee or fixed fee per subscription to be a component of the access seeker's charge for access to the mobile network.

514. In Nkom's view, a fixed price in the form of a coverage fee, as well as other fixed price elements at subscription level, might also exclude access seekers from certain parts of the retail market. High fixed charges at subscription level, for example, might exclude the opportunity to offer products with low ARPU⁷⁴, such as prepaid cards and small data packets.

515. The requirement to offer a single price structure with variable prices has thus been in force since 2016, and Nkom has conducted margin squeeze tests based on variable prices throughout this period. Nkom's experience is that such a price structure has generally worked well for access seekers. The need for predictability therefore also suggests that this requirement for a price structure should be retained.

516. Against this backdrop, Nkom believes that it is necessary to require Telenor to offer regulated access without fixed-price components at subscription level for both MVNO and service provider access in order to remedy competition problems linked to price structure. In practice, this will entail a requirement for the price structure in Telenor's reference offers for regulated access to be based on traffic-dependent (variable) prices. In Nkom's view, any such pricing structure will not have the same limiting effects as a fixed price per subscription on external access seekers' opportunity to compete effectively in the retail market. Nkom makes it clear that Telenor must not design the price structure in its reference offers so as to undermine the purpose of a requirement of traffic-dependent prices. For

⁷³ Per MSISDN.

⁷⁴ Average Revenue Per User.

example, with a design that gives reason to believe that the price structure has the same or equivalent effect as a fixed price at subscription level.

7.5.8.3. Requirements concerning alternative price structures

517. Traffic-dependent prices have traditionally been common in agreements concerning wholesale access to mobile networks. Nkom notes that the EU's international roaming regulations, according to which network owners must offer access to their networks, are based on traffic-dependent (variable) maximum prices. The parties can, however, bilaterally negotiate agreements with other price structures.

518. The effect of a given price structure for the provider's opportunity to offer competitive retail products might differ across various different retail markets and segments. To be able to compete on equal terms, see the non-discrimination requirement, access seekers must have the greatest possible degree of pricing flexibility in the retail market, in the same way as Telenor.

519. Based on information from other supervisory authorities in Europe obtained in advance of the decision of 14 May 2020, and information from Telenor, it appears clear that in markets with effective competition, more than one price structure is being offered for access to mobile networks. In response to enquiries from Nkom, several supervisory authorities have confirmed that linear prices per subscription, non-linear variable prices per subscription, fixed fees per subscription and bulk prices are offered. Different price structures give access seekers the flexibility to have different price models in the retail market.

520. To facilitate that operators can become established in various different parts of the retail market, and have pricing flexibility approximated to Telenor, which is also customary in markets subject to competition, Nkom believes that Telenor must accommodate reasonable requests for price structures other than the price structure stated in the reference offer.

521. Bulk prices, whereby access seekers can purchase a defined volume of traffic for the entire customer base, are one example of an alternative price structure. In Nkom's opinion, such a price structure would mean that external access seekers could obtain a price structure that is more like the structure that the retail businesses of Telenor and other network owners can be considered to face. Any such price model will therefore be appropriate to give access seekers the same opportunities to compete in the retail market as the vertically integrated provider. It will also be appropriate to enable the access seeker to achieve low marginal costs for traffic, and for the access seeker to have strong incentives to leverage the traffic volume purchased from the network owner. Any such price model is in demand among access seekers, which believe that it would be a suitable alternative to a traffic-dependent price. In Nkom's assessment, any such alternative price model gives increased flexibility for access seekers and better opportunities to design new price models in the retail market.

522. Nkom believes that agreements concerning alternative pricing models must be established following negotiations between the parties. Nkom has facilitated more opportunities for individual negotiations by removing the requirement for non-discrimination between external parties (see section 7.2.2). Nkom assumes that this will help to facilitate negotiations by enabling access seekers who want more individually tailored agreements to take on commitments in different ways in return for a payback from Telenor in the form of more tailored pricing terms. Telenor is thus not obliged to offer similar terms to other operators. Access seekers who enter into individual alternative agreements also cannot argue that terms which, according to the agreement, deviate from the reference offer are discriminatory compared with Telenor's own business. Nkom believes that such room for manoeuvre in negotiations has been sought by both access seekers and Telenor.

523. A further purpose of facilitating a greater degree of negotiation is to gradually prepare the market for a situation without sector-specific regulation, where negotiations take place solely on a

commercial basis and the parties are completely free to negotiate terms. In such a situation, the parties must assume all risk for the terms that they enter into, and any disputes must be resolved on the basis of civil law.

524. However, the current market situation is that Telenor has been designated as a player with significant market power, and there are thus significant differences in the balance of power between the contractual parties. This creates a need for a certain regulatory safety net that the parties cannot agree to deviate from. The minimum requirements regarding access set out in section 7.1.8, and the ban on discrimination between internal and external provision except with regard to conditions in cases where agreement is reached to deviate from the reference offer, create such a safety net and a framework for the negotiations, while at the same time Nkom believes that these requirements cannot be said to unreasonably limit the parties' room for manoeuvre in negotiations. The minimum requirements do not prevent the establishment of individual agreements where, for example, the access seeker takes on a number of commitments in different areas in return for different price terms. If the parties are unsure as to what deviations may be made from the reference offer within the framework of the regulation, both parties may request guidance from Nkom.

525. This means that the reference offer must be the parties' starting point for individual negotiations. It must be transparent to the access seeker what changes from the reference offer an individual offer from Telenor contains. Deviations from the reference offer must appear in an appendix to the individually negotiated access agreement. Provided that deviations have been made clear to the access seeker in this way, the access seeker will have to take the risk for the terms entered into within the framework of the regulation. For example, access seekers will be able to enter into agreements with different agreement durations. In such cases, both parties must adhere to the agreed agreement duration and may only opt to revert to the reference offer's prices and terms after the individually negotiated agreement has expired, unless the parties agree to terminate the agreement at an earlier stage.

526. Nkom thus expects access seekers to be able to obtain terms that deviate from those in the reference offer, which could also be a sign that the market is moving towards sustainable competition.

7.5.8.4. Summary

527. The requirements regarding price structure mean that Telenor must make a reference offer based on traffic-dependent variable prices for both MVNO and service provider access.

528. Telenor must also comply with reasonable requests for alternative price structures and facilitate and conduct negotiations without undue delay following the receipt of such reasonable requests. On request, Telenor must document the time spent. If alternative access agreements are entered into, deviations from the reference offer must appear in an appendix to the individually negotiated access agreement.

7.5.9. Price for establishment of access

529. An unreasonably high price for the establishment of access might prevent new operators from entering into access agreements, and thereby establishing competing offers in the retail markets. An unreasonably high establishment fee might, as such, have a similar effect to denial of access. As a dominant operator, Telenor might have incentives to exploit this opportunity to limit competition in the retail markets. Moreover, the price controls in this decision afford a certain scope for rebalancing between different price elements in the access agreements. To prevent any rebalancing from resulting in anti-competitive behaviour, Nkom is of the view that there is a need to set requirements for the level of any potential establishment fee.

530. Nkom acknowledges that there are certain costs associated with making arrangements for operators that require access to Telenor's network, including technical adaptations, testing etc. The price that Telenor may charge for establishing access to its network must be reasonable, however.

531. What constitutes a reasonable price will have to be determined as required in any specific case. In such an assessment, Nkom will give emphasis to:

- Relevant underlying costs. On request, Telenor must be able to document relevant underlying costs for establishment of access for the relevant operator. If Telenor also requires a fixed monthly price to cover ongoing operating costs associated with the access agreement, Telenor must be able to document which costs are covered by this ongoing charge, so that the same cost is not covered by multiple price elements.
- That the price is not an unjustified obstacle to efficient operators becoming established in the market.

7.5.10. Price controls for co-location

7.5.10.1. Assessment of the need for price controls for co-location

532. Nkom considers co-location to be an extremely important form of access for achieving sustainable competition. Co-location enables the development of mobile networks, including improvements to coverage, to take place more efficiently and at a lower cost when passive infrastructure can be shared. The fact that multiple operators can place equipment in the same cabins, masts etc. means cost savings for individual operators. Since the decision of 23 January 2006, Telenor has been subject to a requirement for cost-oriented prices for co-location in order to make the obligation sufficiently effective.

533. In section 7.1.6, Nkom concluded that there remains a need to impose an obligation on Telenor to accommodate reasonable requests for co-location. Telenor has the incentive and opportunity to limit access, and thereby the competition, by charging disproportionately high prices for co-location. The establishment of separate tower companies with independent objectives to engage in commercial activity must be expected to have led not only to a stronger focus and incentive to offer placement to other operators, but also to an incentive to raise prices in order to maximise earnings. According to other network owners, Telenor essentially has a monopoly on placement in many areas where the landowner or municipality does not allow others to erect new masts close to existing infrastructure. In the absence of regulation, Telenor would thus have both an incentive and an opportunity to raise prices where placement is absolutely necessary for other operators.

534. Telenor states that Telenor Norge is the largest customer of the tower company Telenor Towers Norway AS⁷⁵ (Telenor Towers) and will discipline pricing for co-location, as Telenor Norge makes great efforts to reduce its costs. However, Nkom believes that this circumstance will not constitute a sufficiently disciplinary effect. It is Telenor ASA that is regulated, and Nkom does not monitor the profit margins of underlying companies. Thus, Telenor's organisation has no bearing on regulation in this context, nor can Nkom influence which underlying companies can withdraw margins. As a result, Nkom cannot be certain that Telenor will not raise prices for co-location, and thus exploit margins in Telenor Towers rather than in Telenor Norge. Telenor itself notes that its commercial prices for co-location, which apply to Telenor Norge, are higher than the regulated prices. In such a situation, a requirement for non-discrimination would not be sufficient, as the prices charged for co-location could potentially be very high in Telenor Towers, albeit at the expense of lower margins in Telenor

⁷⁵ Telenor Infra AS changed its company name to Telenor Towers Norway AS with effect from 26 March 2024

Norge. Accordingly, Nkom is of the opinion that a ban on price discrimination between internal and external provision would not be sufficient.

535. For the access obligation to be sufficiently effective, Nkom is of the view that it is necessary to impose price controls, cf. Section 4-9 of the Electronic Communications Act.

536. As described in section 6.1, Nkom assumes that the objective of infrastructure competition should govern the choice of remedies used in the market for access and call origination on mobile networks. The use of remedies must thereby support the establishment of new infrastructure. However, as regards infrastructure for co-location (masts, cabins, etc.), the duplication of this equipment is not a competitive objective. On the contrary, co-location will help to reduce costs for the network owners and thereby directly facilitate further development. It also limits the environmental footprint. Nkom therefore believes that price controls should provide an incentive for co-location.

537. Accordingly, Nkom believes that there is a need to continue the requirement for cost orientation for co-location, as this is the most suitable method given the purpose of the regulation.

7.5.10.2. Further considerations regarding the cost orientation requirement for co-location

538. The requirement for cost-orientation for co-location entails that Telenor must be able to demonstrate that the revenue from co-location does not exceed the costs, including a reasonable return on capital. Pursuant to Section 4-9, paragraph three of the Electronic Communications Act, certain systems for keeping cost accounts may be imposed together with price control obligations.

539. According to the decision on 14 May 2020, Telenor was required to regularly submit reports in the form of annual cost accounts for co-location in mobile networks. Nkom also imposed a requirement for the annual reports to be verified by an auditor. Nkom believes that there is a need to continue this regular reporting, as this is the most effective way of following up the requirement.

540. Nkom has previously assessed whether cost accounts for co-location in mobile networks must be prepared per base station, or as overall accounts for all of Telenor's base stations. Nkom maintains that cost accounts per base station would not give a very good overview or provide robust cost figures, since this would entail a high degree of cost distribution, with a disproportionately high level of detail. Nkom is therefore of the view that overall, aggregated cost accounts for co-location in mobile networks are the only appropriate solution. Cost accounts for co-location in the fixed network are prepared in the same way.

541. Aggregate cost accounts entail that pricing can be based on average calculations. This entails that the rental price for placement at a specific base station will cover a share of the operating costs and depreciation of all base stations, including a reasonable return.

542. Nkom stresses that the cost accounts must also include placement in all facilities that are owned by Telenor and used for Telenor's mobile network.

543. The principles for reporting cost accounts are stated in section 7.5.12. Below, Nkom elaborates on what the requirement for cost-oriented price entails in relation to capacity expansions.

7.5.10.3. Construction contributions for capacity expansions related to co-location

544. The price charged for leasing space in Telenor's facilities will primarily cover a share of operating costs and depreciation at existing facilities. If Telenor has no capacity available at a facility where placement or increased capacity has been requested, the cost of the measures taken to expand capacity can be allocated and charged to those requiring capacity as a construction contribution. This entails that if Telenor itself requires extra capacity at the relevant facility, the company must bear its share of the costs. The same applies if Telenor benefits from the measure. Beyond this, costs can be

distributed among the party or parties requesting the capacity before the measure has been carried out.

545. An alternative could be a general increase in rent to cover capacity expansions for some facilities. However, Nkom believes it is reasonable for those who need the capacity to cover costs that can reasonably be attributed to the change in the facility. For example, expansions and changes may result in liquidity outlays that it is not reasonable for Telenor to bear. The fact that the requestor must pay such costs also gives the access seeker an incentive to consider various alternatives to co-location and choose the most cost-effective alternative.

546. In this connection, Nkom finds that the party that requests a placement that involves change measures must cover the total cost of the measure, even if the measure results in there also being some available capacity at the relevant location. In principle, however, Telenor must select the simplest and most reasonable measure to expand capacity, if there are multiple alternatives, cf. section 7.1.6.

547. To facilitate the efficient functioning of the co-location obligation, Nkom believes that cost-orientation requirements must also apply to the construction contribution. The offer that Telenor submits to the placement requestor may be based on actual figures, to ensure that the process can get started quickly. The offer must include more detailed specification of the measures that must be taken to expand capacity. However, the final invoicing must be based on actual costs incurred for materials, building permit costs, compensation to landowners, contractors' invoices, other subcontractors, etc. Invoices must be specified to the greatest possible extent, so that the access seeker can assess the reasonableness of the various cost elements. It must be possible for costs to be documented to Nkom on request.

548. On a random sampling basis, Nkom will also be able to check that completed capacity expansions covered by construction contributions observe the principles that the simplest and most affordable measures should be chosen. Reference is made to section 7.1.6.1 of the decision for a more detailed review of the principles for the choice of solution. Nkom requires a comprehensive assessment of alternative solutions in which the costs of the measures carry significant weight. If there are simpler and more affordable solutions than those selected, Telenor must document the assessment on which the choice is based. It might be relevant for Nkom to use external assistance to assess the selected capacity expansion solution and that the construction contribution solely covers actual accrued costs for the selected solution.

549. The final invoice may be lower or higher than the estimated price. To ensure predictability and prevent the access seeker from facing a situation in which the actual price is significantly higher than envisaged, Nkom considers it reasonable to impose the requirement on Telenor that the actual price may not exceed the price estimate by more than 15 per cent⁷⁶. This requirement gives Telenor incentives to calculate a probable price estimate, and the risk and cost of a price estimate that is too low will be shared between the access seeker and Telenor.

550. All costs that are covered by construction contributions must be capitalised and written-off so that the cost is accrued in the cost accounts. The construction contribution must also be recognised as revenue in the cost accounts. Even though the periods for depreciation and revenue recognition of construction contributions can be different, the total depreciation for a change measure must have a corresponding revenue entry over time. The investment as a consequence of the change measure will therefore, over time, not have any effect on the result in the cost accounts, nor will it influence the rental price.

⁷⁶ An equivalent provision can be found in Section 33 of the Norwegian Craftsman Services Act.

551. With a practice as described above, purchasers of co-location will have to pay rent for placement in a facility for which they also have paid construction contributions, since the rental price covers operating costs and investments in existing facilities. Capitalisation and accrual of the costs of the change, and the related construction contribution as described above, will prevent Telenor from receiving duplicate cover of the costs of the change measure.

7.5.10.4. Phase-in of the condition of reciprocity

552. Telenor has stated that the requirement for cost orientation based on historical cost is not proportionate. Telenor points out that all three players have established their own tower companies and co-location are mutual agreements on the use of each other's physical infrastructure where this is cost-effective or where a favorable location, access to electricity or protection of the environment make it attractive to share the resource. At the same time, pricing in this part of the market has developed to become highly asymmetric according to Telenor, with Telia and Ice charging far higher prices for co-location in their base stations than Telenor. In its input to the national consultation, Telenor has calculated the annual rent based on the price lists for the three tower companies for two example sites, which substantiates the claim. Telenor further states that the price regulation in the form of requirement for cost-orientation does not give the company incentives for cost-effective development of infrastructure, which means that capacity expansion required by the customer financed with construction contribution are preferred rather than building with additional capacity.

553. Both Telia and Ice buy co-location from Telenor to a considerable extent. Nkom is concerned about a development with an increase in commercial prices for co-location, especially considering that the regulation in market 15 aims to be phased out within a few years. There will then be a risk of significant price increases for the players who have been able to buy co-location at regulated prices.

554. The goal of cost-effective roll-out of mobile networks and mutual use of co-location to reduce costs makes it relevant to consider principles of reciprocity. Introduction of such principles will give both Ice and Telia the opportunity to co-locate at cost-oriented prices throughout the regulatory period, but will require that they themselves operate with prices that are on par with Telenor's commercial prices (which as of today exceed the regulated prices).

555. Nkom considers that in light of market developments and that the regulation of market 15 is expected to be phased out in a few years, a condition of reciprocity will help to prepare the market and make it possible for the players to continue to have incentives to co-locate. Nkom assumes that both Ice and Telia will have incentives to reduce their prices for co-location to Telenor and each other, as they are both net buyers of co-location.

556. The pricing of co-location is, however, difficult to compare directly as there are large variations in the price structure, varying extent of equipment that is installed at different stations and whether there is a need for capacity expansions with associated construction contributions in order to be able to carry out installation.

557. In its consultation response, Telenor has proposed a solution which involves comparison of the annual rent for a number of standard configurations of mobile sites based on the price lists of the three tower companies. If Telenor Tower's commercial prices are lower than what the other players offer, Telenor Tower is given the right to take commercial prices from the players who themselves charge a higher price than Telenor Tower's commercial prices. Income and costs for mobile operators Telenor Tower can give commercial prices to, are removed from the current year's cost accounts for mobile. If Telia and Ice's prices are at the same level as or lower than Telenor's commercial prices, they will still be entitled to cost-oriented prices according to the principles in the decision.

558. Nkom believes that the basic principles in Telenor's proposal are relevant, but for a system with conditions on reciprocity to function as intended, clear principles are required that ensure objective comparisons of prices. Furthermore, a representative selection of sites must be ensured for comparison and construction contributions must be taken into account in an objective and reasonable manner. Processes and results must also be transparent for market participants. For example, it could be appropriate for the three MNOs to select a few representative sample sites each and for them to calculate the annual rent for all selected sites based on their list prices. The calculations must be made available to all parties.

559. Establishing principles that ensure objective comparisons and transparent processes will take some time. Nkom will soon after the decision has entered into force ask Telenor to prepare a proposal for a detailed system according to the above principles of objective and transparent comparisons. Nkom will then carry out a separate process where buyers of regulated access will have the opportunity to comment on the principles in a separate consultation. The principles for the comparison will then be determined in a separate decision. Furthermore, the actual comparison of rental prices must be carried out according to the established principles and Nkom will conclude on whether the requirement for reciprocity is met.

560. The conditions on reciprocity can enter into force from 1 January 2025 at the earliest. Until entry into force, the requirement for cost orientation as set out in the decision will apply regardless of reciprocity. This also gives access seekers reasonable time to adapt to new conditions.

561. If Nkom does not find that Telenor's system for reciprocal prices is in line with the principles of objectivity and transparency, or that the system has other unintended negative consequences, the requirement for cost orientation will continue as the decision assumes without conditions on reciprocity.

7.5.11. Assessment of proportionality concerning obligations relating to price and accounting controls

562. Nkom imposes price controls on Telenor in the form of a ban on subjecting access seekers to margin squeeze. This regulation is essentially a continuation of the previous price controls regarding MVNO access and service provider access, albeit with some minor changes. As mobile broadband is no longer covered by the regulation, cf. chapter 2 of the market analysis, dedicated subscriptions for mobile broadband will not be covered by the margin squeeze test. Furthermore, Nkom has come to the conclusion that it is both necessary and proportionate to divide the retail product "Business Total" into seven segments based on the number of subscriptions per business customer. Each of the seven segments will be tested as standalone products with a positive gross margin requirement. This segmentation will better enable service providers to compete in different parts of the business market and, as a minimum, achieve a positive gross margin. Telenor has already been submitting reports according to this segmentation on a trial basis. Nkom thus considers the administrative burden to be manageable.

563. As regards national roaming, the prohibition against margin squeeze and the requirement for linear prices under the price controls will be discontinued. This will constitute regulatory easing for Telenor.

564. Margin squeeze tests have been used as a regulatory tool during the period since the decision of 1 July 2016. Nkom believes that Telenor's experience of price controls has contributed to a gradual reduction in the administrative burden. It is still assumed that Nkom will undertake the development of the actual model that will be used in the tests, which will also help to reduce the administrative burden for Telenor. The experience gained with margin squeeze tests from the two previous regulatory

periods will also facilitate the effectiveness of the regulation from the date of entry into force of the new decision.

565. The benefits of a prohibition against margin squeeze is considered to outweigh the disadvantages for Telenor. Nkom therefore considers such an obligation to be proportionate.

566. Nkom continues the requirement to charge reasonable prices for establishment and does not consider this to be a disproportionate requirement.

567. The requirement for cost orientation for co-location is basically a continuation from earlier, including the requirement for annual reporting of cost accounts. Nkom assumes that the reporting obligation is not disproportionately burdensome for Telenor as Telenor already has a system for keeping cost accounts for co-location. However, Telenor has stated that the requirement for cost orientation based on historical cost is not proportionate in light of market developments. Nkom believes that cost orientation according to the principles in the decision are the method best suited to safeguarding the goal of cost-effective development of mobile networks. However, Nkom recognizes that the requirement for reciprocity, provided that comparisons can be made objectively and transparently, is expedient in light of the market situation. Nkom has therefore partly complied with Telenor's proposal. This will help to make the obligation for cost-oriented prices more proportionate.

568. Accordingly, Nkom believes that the price controls in the decision are proportionate, as no other less intrusive measures are available which are suitable for achieving the purpose in question.

7.5.12. Specific obligations related to price controls and cost accounting.

569. Nkom refers to the aforementioned assessments concerning which specific obligations relating to prices and account control are to be imposed on Telenor in Market 15. The specific obligations imposed on Telenor ASA (referred to hereinafter in this chapter as Telenor) are stated in this chapter.

570. On the basis of Section 4-9 of the Norwegian Electronic Communications Act, Nkom requires Telenor to offer MVNO access at prices which entail that the access seeker is not subject to margin squeeze. Telenor must pass a portfolio-based margin squeeze test of the retail products, in line with section 7.5.5, section 7.5.7 and Annex 2. Prices for access to mobile data must not be higher for MVNO access than for service provider access. The MVNO rates for voice and SMS must not be higher than half of the service provider prices.

571. Pursuant to Section 4-9 of the Electronic Communications Act, Nkom orders Telenor to offer service provider access at prices which entail that the access seeker is not subject to margin squeeze. Telenor must pass a gross margin test for a selection of Telenor's products, in line with section 7.5.6, section 7.5.7 and Annex 2.

572. Pursuant to Section 4-9 of the Electronic Communications Act, Nkom requires Telenor to offer a reference offer, cf. section 7.3, with traffic-dependent (variable) access prices for each form of access. An access agreement with a fixed price per subscription may be offered as an alternative, but such a price structure, or price structure with equivalent effect, may not be the only price structure offered.

573. Pursuant to Section 4-9 of the Electronic Communications Act, Telenor must comply with reasonable requests for alternative price structures, cf. section 7.5.8. Deviations from the reference offer must appear in an appendix to the individually negotiated access agreement.

574. Pursuant to Section 4-9 of the Electronic Communications Act, Nkom orders Telenor to offer the provision of access at reasonable prices, cf. section 7.5.9.

575. Pursuant to Section 4-9, paragraph two of the Electronic Communications Act, Nkom orders Telenor to offer co-location at cost-oriented prices; see section 7.5.10. Nkom allows for phasing in a

condition of reciprocity during the regulatory period, provided that this can be implemented according to objective and transparent principles.

576. Pursuant to Section 4-9, paragraph three of the Electronic Communications Act, Nkom orders Telenor to keep cost accounts for co-location in mobile networks based on fully distributed historical costs. The cost accounts must be prepared as combined accounts for all of Telenor's base stations, and must satisfy the following requirements:

- Product revenue and product costs (including depreciation), imputed interest payments and capital employed for co-location for mobile telephony must be separated from other operations and appear as a separate profit unit.
- Costs/capital that is not directly attributable must be allocated to the profit unit based on an analysis of the causal relationship, insofar as this is possible. Remaining costs/capital must be allocated in proportion to previously allocated costs/capital.
- All costs that are covered by construction contributions must be capitalised and written-off so that the cost is accrued in the cost accounts. The construction contribution must also be recognised as revenue in the cost accounts. Even though the periods for depreciation and revenue recognition of construction contributions can be different, the total depreciation for a change measure must have a corresponding revenue entry over time.
- The cost accounts will be based on the financial accounts, with the exception of the financial items to be replaced by imputed interest on the book capital employed. The cost accounts must be reconciled with the financial accounts, and any discrepancies must be explained.
- The imputed interest must correspond to the applicable imputed interest rate set by Nkom for the mobile markets.

577. Nkom may specify the layout of the accounts and the individual items in more detail.

578. Pursuant to Section 4-9, paragraph three of the Electronic Communications Act, Nkom orders Telenor to ensure that the cost accounts are reviewed by an external auditor according to the standard for limited audits. Among other things, the auditor will prepare a confirmation that the cost accounts comply with the stipulated system of cost accounting, including verification of the reconciliation with the audited financial accounts. In addition, it must be verified that distribution keys fulfil the activity-based costing requirements. The auditor must have access to all relevant documentation in order to express an opinion about the cost accounts.

579. Pursuant to Section 4-9, paragraph two of the Electronic Communications Act, Nkom orders Telenor to submit the aforementioned cost accounts to Nkom annually by 1 July of the following year. The first report after this decision will be for the 2024 financial year and must be submitted to Nkom before 1 July 2025.

580. Pursuant to Section 4-9 paragraph two of the Electronic Communications Act, Nkom orders Telenor to base any construction contributions for capacity expansions in conjunction with co-location on actual costs incurred, cf. section 7.5.10.3. Offers of capacity expansion must specify what measures will need to be taken in order to expand capacity. In principle, however, Telenor must select the simplest and most reasonable measure to increase capacity, if there are a number of possible options. The invoice for construction contributions must be specified to the greatest possible extent. It must be possible for costs to be documented to Nkom on request. If offers are given on the basis of estimated costs, the actual price may not exceed the price estimate by more than 15 per cent. If the selected capacity expansion solution is also of benefit to Telenor, the construction contribution must be reduced equivalently.

7.6. Assumed consequences of the use of remedies

581. Assumed consequences are described in the aforementioned sections for the individual specific obligations. It is the price regulation in section 7.5, however, that will have the most direct and measurable consequences. These are therefore explained in more detail in this chapter.

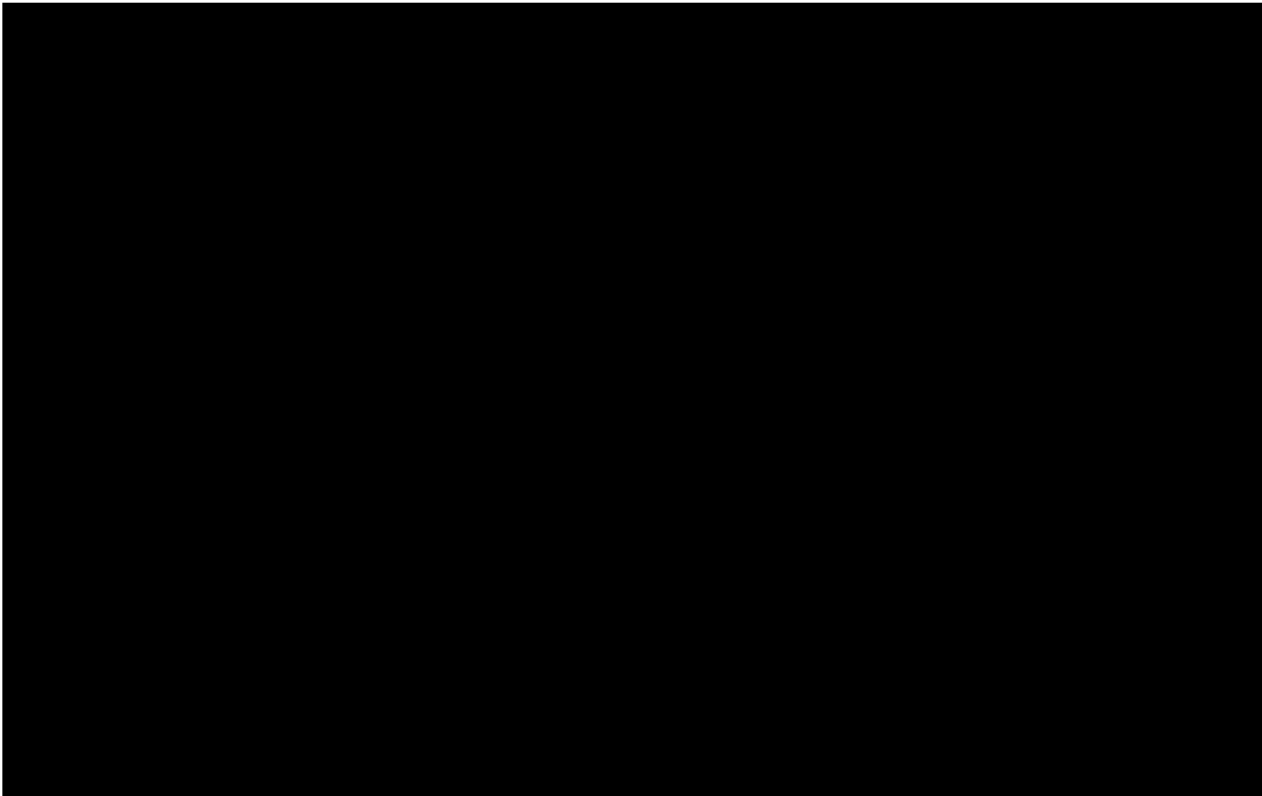
582. The main objective of the regulation is to facilitate sustainable infrastructure competition in the form of three competitive networks. The analysis indicates that, although Norway is well on the way to achieving this objective, there is still a need for sector-specific market regulation for a further period. The decision is aimed at maintaining remedies that facilitate the efficient development of the third network, as well as continued growth and competitiveness in the retail market.

583. With regard to price controls for national roaming, Nkom already signalled in its decision of 14 May 2020 that this would be terminated after the current regulatory period. This was an important signal aimed at providing incentives for efficient development during the regulatory period. Nkom maintains its decision to abolish price controls for co-location and only continues the access obligation concerning national roaming with requirements concerning reference offers, non-discrimination and accounting separation. This will ensure that Ice has predictability as regards access to the network during the decision period, while the discontinuation of price controls will provide an incentive to keep up the pace of development to enable the company to free itself from the national roaming agreement. Ice must also be expected to have a relatively low volume of access purchases during the forthcoming regulatory period, with the consequence that the financial risk to Ice as a result of the ending of price controls is limited.

584. At the same time, technological advances and customers' ever-increasing expectations as regards coverage and speed will require the density of base stations to be increased for all operators. In this context, access to co-location will be important in order to contribute to efficient development for Telia, Ice and any other operators who establish themselves with their own coverage in the relevant market. In order to make the obligation regarding co-location effective, Nkom will continue the requirement for cost-oriented pricing for co-location. This will contribute to cost-effective placement for operators within the regulated market and offer an incentive for co-location rather than the duplication of passive infrastructure. The phasing in of reciprocity conditions is also intended to strengthen the incentives for mutual co-location and to facilitate continued effective co-location when regulation of market 15 is eventually discontinued.

585. To facilitate service competition until the goal of sustainable competition is reached, Nkom orders Telenor to offer access for MVNO and service providers at prices that do not put providers in a margin squeeze. Nkom believes that this requirement is best-suited to remedying the competition problems and balancing the need to facilitate infrastructure competition against the need for service competition.

586. As a result of Nkom's margin squeeze tests, Telenor has on a number of occasions revised access prices downwards in order to fulfil the positive margin requirement. The figure shows developments in access prices since the previous market decision was made.



587. The development shows a declining trend for access prices for data traffic since 2020. The reduction was greatest during the 18 months following the decision, and thereafter appears to have stabilised to some extent. Nkom expects price developments to continue to have a slightly falling trend when the prohibition against margin squeeze is continued.

588. Compared with the regulated prices for international roaming,



The Commission's maximum prices are based on a pan-European cost model developed in 2018, in which prices were set at a level that would ensure cost coverage for all network owners in Europe. The model will be updated in 2024. However, the BEREC Benchmark Data Report⁷⁷ indicates that providers achieve lower average wholesale prices for data (EUR 1.65 for Q3 2022) than the regulated level for international roaming through commercial negotiations. Accordingly, Nkom considers that Norwegian access prices have fallen to a level comparable with other access prices in Europe.

589. At the same time, the measures aimed at facilitating the negotiation of alternative price structures will enable access seekers to negotiate other price structures that are better suited to their use and end-user segments than the reference offer's price structure.

590. In the somewhat longer term, it must be assumed that facilitating increased infrastructure competition will MVNOs and service providers to a greater extent benefit in the form of more choice and lower access prices.

591. Nkom also assumes that the regulation will promote competition in the retail market. The residential market is currently characterised by the strongest price competition among access seekers that do not have their own network, followed by Ice. These providers offer the lowest end-user prices

⁷⁷ [International Roaming BEREC Benchmark Data Report October 2018 – March 2019 \(europa.eu\)](https://europa.eu)

for mobile subscriptions with low or medium volumes of data or free data included in the subscription. In Nkom's experience, this has been the case over time.

592. Chapter 4 of the market analysis shows that turnover per GB of data has been declining (Figure 7) and that the differences in average revenue per GB of mobile data between Norway and other Nordic countries are decreasing (Figure 10). Nkom expects this trend to continue during the coming regulatory period.

593. At the same time, access seekers have described very squeezed margins, so it is not certain that improved access terms will be directly reflected in reduced end-user prices. As mentioned previously, Nkom expects Ice to strengthen or at least maintain its competitiveness during the period, in line with further development. Nkom assumes that more infrastructure-based competition as a consequence of a more competitive third network will in the longer term have a greater impact in the retail market.

594. Based on the above, Nkom concludes that the assumed consequences of the decision are in accordance with the objectives on which the regulation is based, namely duplication of the infrastructure where possible, while at the same time securing access seekers sufficiently favourable terms for their operations and create competition at service level. Nkom cannot see that there would be a risk of significant unintended consequences of the use of remedies in this decision.

7.7. Overall assessment of proportionality

595. The requirement for the use of remedies to be proportionate is aimed not only at proportionality in the use of the individual remedy, but also at the combined effect of the remedies used.

596. Based on the market analysis and the competition problems identified in the market for access and call origination on mobile networks, Nkom has assessed which obligations will be best suited to rectifying actual and potential competition problems.

597. Nkom believes there is a need to continue the access obligation for service provider access, MVNO access, national roaming and co-location within the relevant market. Nkom has delineated the market with respect to IoT/M2M communication, cf. chapter 2 of the market analysis. The delineation with respect to dedicated mobile broadband entails an easing of the obligations compared with the previous decision in that the access obligation will not apply to access in order to offer dedicated mobile broadband. However, Nkom has identified a need to clarify the access obligation relating to Telenor's right to make changes, in order to create greater predictability for access seekers.

598. Effective co-location is vital for network expansion and facilitating sustainable competition. Nkom therefore continues the current requirements relating to both the access obligation itself and the price controls. This entails deadlines for Telenor's processing of requests and half-yearly reporting of the scope of request applications, approvals and construction contributions, as well as time spent.

599. The non-discrimination obligation has been simplified by discontinuing the ban on discrimination between external parties. The non-discrimination requirement is imposed in the relationship between internal and external provision, but Nkom stresses that the requirement will not prevent Telenor, at the request of and following negotiations with the access seeker, from entering into an access agreement with terms that deviate from the terms of the reference offer. This will constitute regulatory easing for Telenor. At the same time, Nkom expects this to facilitate individual commercial negotiations concerning access, hopefully enabling access seekers to achieve more individually tailored price structures for access.

600. The transparency obligations are essentially also a continuation of existing obligations.

601. The requirement for accounting separation as regards MVNO access and national roaming represents a continuation of the previous regulation, as this is a tool for following up the requirement for non-discrimination between internal and external provision. However, the reporting frequency concerning MVNO access is being revised from three times a year to annual reporting. As regards national roaming, accounting separation must be reported only upon request, as and when such access is granted and an access agreement established. Individually negotiated agreements with alternative price structures are not subject to a requirement for accounting separation. The change in reporting frequency represents a significant easing of the regulation, which will reduce Telenor's resource needs in terms of both its own internal resources and the need to obtain auditor confirmations. As access to offer M2M/IoT and mobile broadband is not part of the relevant market, revenues and expenses for such services need not be included in the accounting statements. Under the current regulation, Nkom requires Telenor to prepare an additional report which presents revenues and costs for M2M/IoT separately. The requirement to submit such additional reports is being revised in that such reports will only need to be submitted at the request of Nkom.

602. Price controls for national roaming will be discontinued. This will entail a significant regulatory easing for Telenor.

603. Nkom is continuing the price controls in accordance with Section 4-9 of the Electronic Communications Act as regards MVNO access and service provider access. The price controls concerning MVNO access and service provider access essentially entail similar tests and follow-up as those which applied following the decisions of 1 July 2016 and 14 May 2020.

604. The half-yearly tests are performed by Nkom and are based on the margin squeeze test principles. Nkom will use a margin squeeze model that, in each testing instance, must be adapted to the relevant parameters that, according to the principles, are to be included. The tests calculate margins for representative products. The overall effect is that efficient access seekers are not excluded from either all or parts of the retail market. As regards service provider access, the testing of subscriptions in the business market is being altered slightly, in that the Business Total product is being segmented. The aim of this is to facilitate competition in the business market. Telenor has already been reporting in accordance with the new segmentation on a trial basis, and the administrative burden on Telenor can therefore be considered to be limited.

605. Nkom believes that the price controls ensure that the competitive conditions are reasonable for operators competing in all or some of the defined retail markets, while at the same time ensuring that the need for incentives to invest is addressed.

606. The price obligations are supplemented by requirements regarding price structure. The requirement for traffic-dependent (variable) access prices for all forms of access represents a continuation from earlier, and it also applies to the obligation to accommodate reasonable requests for alternative price structures. Bulk pricing may be one such alternative price structure, but Nkom is not stipulating specific requirements regarding how the price structure should be designed. This will be a matter for negotiation between the providers. The simplification of the requirement for non-discrimination referred to above (the requirement will not apply between external parties) is intended to create greater scope for individual negotiations. Nkom believes that these changes also represent a regulatory easing for Telenor compared with the decision of 14 May 2020.

607. Nkom is of the view that the interrelationship between the remedies, as described above, is necessary for the regulation to provide incentives for investments while also facilitating competition for services and product innovation.

608. The price controls for co-location are based on the same principles as before, i.e. cost orientation with a requirement to annually submit cost accounts verified by an auditor. At the same time, Nkom believes that the goal of cost-effective development of mobile networks and mutual use of

co-location to reduce costs makes it relevant to implement principles of reciprocity. During 2024, Nkom will assess detailed principles and aims to make a decision on the introduction of such a system during the year.

609. Nkom believes that the remedies effectively address the identified competition problems. The overall regulatory burden for Telenor will be somewhat lower than that which applied in accordance with the decision of 14 May 2020. Nkom wishes to gradually prepare the market for the future discontinuation of sector-specific regulation.

610. Nkom believes that the obligations that are being continued are necessary in the context of achieving the objective of sustainable competition. The fact that the overall effect may be burdensome for Telenor cannot be a determining factor for as long as no less burdensome forms of regulation exist that are just as appropriate to achieve the intended result. Nkom has not been able to identify any such alternatives.

7.8. The use of remedies and sanctions in accordance with the Electronic Communications Act and changes in the use of remedies in the decision

611. Nkom has found that there is still a basis for the advance regulation of the mobile market for access and call origination.

612. Nkom's follow-up of the obligations imposed is basically described in sections 7.1.9, 7.2.5, 7.3.8, 7.4.7 and 7.5.12.

613. If a breach of one or more of the obligations in the decision is discovered, Nkom will follow these up by assessing whether the remedies provided for in the Electronic Communications Act and the Electronic Communications Regulation should be applied, including whether the conditions are met. Nkom will use remedies such as the rectification requirement, coercive fines or, at the request of the provider, the repayment requirement, in cases where this is deemed to be necessary, appropriate and proportionate. How the case should be followed up will be assessed in each individual case. The same applies to sanctions in the form of an infringement fee in accordance with the Electronic Communications Act.

614. In situations where the remedies set out in the decision do not function as intended, Nkom has the opportunity to change the use of the remedy when this is appropriate. Second 3-4, third paragraph, of the Electronic Communications Act states that the authority may amend obligations that have been imposed. The preparatory remarks state that *"imposed obligations may be changed when this is appropriate"* and that such a *"change may be made without a new market analysis if the obligations imposed are not successful"*.⁷⁸

615. As specified in the preparatory remarks, changes can be made to the remedies without a new market analysis if the obligations imposed *"are not successful"*⁷⁹. In overall terms, this entails that the development during the regulation period is not moving towards the objective of sustainable competition. Indications of this might include a low number of newly established operators in the market, a low development rate for the third network, or that the well-established operators even more strongly consolidate their already strong positions. The list is not exhaustive, however, and there may also be other conditions indicating that the remedies *"are not successful"*.

⁷⁸ Proposition No. 58 (2002-2003) to the Odelsting, p. 100 - 101.

⁷⁹ *Ibid.*

616. The fact that changes can be made to the use of the remedies without prior market analysis entails that Nkom can make changes to the current regulation within a relatively short time. This will be appropriate, expedient and effective within the decision's time horizon of three years.

617. Changes in use of the remedies must be assessed specifically according to the relevant situation. Nkom cannot specify in advance the specific remedies that will apply if other remedies prove to be unsuccessful. It is, however, specified in the preparatory remarks that *"use of remedies may be tightened if the remedies imposed prove not to function as assumed"*⁸⁰..

618. As stated in section 7.5.7 concerning the follow-up of price controls, a more intrusive form of margin squeeze regulation might be to require a margin squeeze test to be passed before an end-user offer can be made in the market. Such a stricter form of price control might be an option if it proves necessary to amend the remedies.

8. Relationship to the current decision

619. Nkom's decision of 14 May 2020 to impose specific obligations in the market for access to and call origination on public mobile telephone networks will be repealed when the new decision enters into force.

620. Telenor ASA must continue to report its accounting separation according to the same principles as set out in previous decisions for the full-year 2023. The aforementioned report must be submitted to Nkom by 1 July 2024. The first report in accordance with this decision must cover the full year 2024 and be submitted to Nkom by 1 July 2025. The full-year report must then be submitted by 1 July each year.

621. Margin squeeze tests must be conducted in accordance with the principles set out in this decision. The first ordinary margin squeeze test will be conducted in 2024.

622. Cost accounts for co-location must be submitted in accordance with the principles set out in this decision on 1 July each year, from and including 1 July 2025 for the 2024 financial year.

9. The effective date of the decision, the deadline for appeal, etc.

623. The decision will take effect on May 1, 2024. However, Nkom assumes that Telenor will need some time to develop new standard terms and conditions in line with the decision for the various forms of access. At the same time, it is important that access buyers are able to make use of the rights granted by the decision relatively quickly. Against this background, Telenor will be given a six-week deadline from the date of the decision on 9 April 2024 to develop new standard terms.

624. The decision may be appealed; Section 11-6 of the Electronic Communications Act and Section 28 of the Public Administration Act. The deadline for appealing a decision is normally three weeks; Public Administration Act § 29, first paragraph. The decision is comprehensive, and because of the scope, Nkom believes that there are grounds for an extended appeal deadline; Public Administration Act § 29, fourth paragraph. The deadline for appealing is therefore set at 4 weeks from the date of the decision. Any complaint should be addressed to the Ministry of Digitalisation and Public Administration (DFD) and sent to the Norwegian Communications Authority.

625. The decision to postpone implementation of the decision may only be made by the Ministry of Digitalisation and Public Administration (DFD), cf. Section 11-6, fourth paragraph, of the Electronic

⁸⁰ *Ibid*

Communications Act; Public Administration Act § 42. If, during an appeal procedure, the decision is granted deferred implementation, existing obligations will continue until the appeal has been finally decided.