Nasjonal kommunikasjons-myndighet

Results of public consultation

Annex 3

Case 2300455

9 April 2024

Contents

1 Introduction

This document summarises the consultation responses that the Norwegian Communications Authority (Nkom) received to its notification of a decision of 28 September 2023 in the market for access to and call origination in public mobile communications networks (previously Market 15).

A draft market analysis was published for national consultation during the period 22 March to 14 May 2023. The consultation responses were summarised in Annex 3 to the draft decision of 28 September 2023 and have been published on Nkom's website.

The draft decision and associated annexes were distributed for national consultation during the period 28 September 2023 to 10 November 2023. The following parties submitted responses to the consultation:

- Elmera Group/Fjordkraft mobil (Fjordkraft)
- Chilimobil AS (Chilimobil)
- Ice Communications Norge AS (Ice)
- Telavox AB/eRate AS (Telavox)
- Telenor ASA (Telenor)
- Telia Norge AS (Telia)

Nkom invited the operators to comment on the consultation responses received by 6 December 2023. Aller Media AS/Plussmobil (Aller Media), Ice and Telenor submitted comments on the consultation responses.

Nkom briefly summarises its views on the relevant comments and how the input has been addressed.

The consultation responses are available on Nkom's website.[1]

2 General comments

Consultation remarks

Telenor does not support Nkom's market analysis. Telenor believes that Nkom draws the wrong conclusions regarding relevant markets, and that there are major deficiencies in the analysis of the wholesale market. Furthermore, the conditions for regulation are not met; there is no basis for further regulation and the dominance analysis is deficient. Ice's position as a fully fledged network operator is particularly underestimated. Telenor also believes that the remedies chosen by Nkom primarily

[1] See: http://www.nkom.no/marked/markedsregulering-smp/marked/marked-15

promote service competition, rather than infrastructure competition. In its comments to the consultation responses, Telenor states that a number of operators are now advocating the discontinuation of the regulation.

Chilimobil supports Nkom's conclusion that Telenor has a strong market position in the wholesale market. Retail prices in Norway are too high, and the regulatory regime has not had the desired effect on competition. In light of this, Chilimobil believes that it is no longer appropriate to continue the regulation in its current form and that sector-specific ex ante regulation should now cease. Chilimobil believes that a market without regulation would allow natural and healthier competition that benefits end-users through a better range of services and lower prices. The regulation should be replaced with an access obligation on commercial terms, which would enable resellers to attract venture capital.

Fjordkraft supports Nkom's conclusion that Telenor has a strong market position and that there is a need to regulate access to service providers. Fjordkraft believes it is a major paradox that the appeal process concerning the previous decision for Market 15 has not yet been concluded by the Ministry. Furthermore, the proposed regulation would not be sufficient to enable service providers to remain competitive.

Ice agrees with Nkom that the Norwegian mobile market still qualifies for regulation. The development of the Norwegian mobile market is moving in a positive direction, and as long as this development continues, Ice agrees that the need for regulation will recede.

Telia has only commented on the measures announced in its consultation response. Telia supports the repeal of price controls for national roaming and the view that the requirements concerning co-location must be continued.

Telavox agrees that the market is not tending towards effective competition and that Telenor must be subject to special obligations as an SMP operator. The company believes that the market analysis has a disproportionate focus on the third network. Telavox believes that MVNOs contribute most to competition in the market. The regulation should therefore focus on supporting the contributions of the MVNOs.

In its comments to the consultation response, **Aller Media** has endorsed Telavox's input, with regard to both the designation of Telenor as a provider with a strong market position and the imposition of special obligations. The company also believes that a third network is not necessarily the solution; it is the MVNOs that contribute to competition and innovation in the market. This means that the decision must have more tangible obligations for MVNOs.

Nkom’s assessment

Nkom notes that there are somewhat differing views regarding whether there is a basis for sector-specific regulation and the kind of regulation that is needed. However, only Telenor argues that there is no need for any form of regulation. The overarching comments are largely consistent with comments submitted concerning the consultation on the analysis in May 2023. The comments have not led Nkom to change its conclusion that the market warrants a further period of ex ante regulation and that Telenor holds a strong market position in the wholesale market for access and origination in mobile networks. Many of the comments will be considered in more detail in subsequent chapters of this summary.

3 Framework for the analysis

Assessment and conclusions in the market analysis

Nkom’s market analysis has a time horizon of three years. The market analysis was carried out in light of the new provisions proposed in the new Electronic Communications Act, according to which the market analysis is limited to apply within a time frame of five years.

Consultation remarks

Telenor believes that a five-year analysis period would have been natural in order to assess whether the market is tending towards effective competition. The conclusion would then undoubtedly have been that the market structure was tending towards competition during the regulatory period, as Ice would have a fully-fledged network, even with significant delays. Given that Nkom is now opting for a shorter regulatory period, Nkom must also assess what is likely to happen after **the** three-year period, and in any case within the normal period of five years; cf. Section 6-4, paragraph eight of the proposed new Electronic Communications Act. No such analysis has been carried out. Given that there is clear evidence that the market structure is tending towards competition after the regulatory period, which has been set to three years, Nkom has no basis for regulating at the present time.

Telenor has also noted that Nkom bases its updated market analysis on figures which date from 2022. According to Telenor, Nkom should have utilised the most recently available figures. There is a risk of underestimating the competition under the relevant period, and therefore leading to wrong conclusions, by using figures dating from 2022.

Nkom’s assessment

According to Section 6-4, paragraph eight of the draft version of the new Electronic Communications and Article 67 (5) of the Electronic Communications Directive, new market analyses and draft decisions must be notified within five years from the date of the current market decision. This does not mean that the market analysis must have a time period of five years, but it can cover such a time period. As Nkom expects changes to occur over the coming years, particularly as a result of Lyse's acquisition of Ice and their plans of development, Nkom believes that an analysis period of less than five years would be appropriate to ensure that market developments are reflected in the regulation in the best possible way.

The starting point for the analysis is what is known as a "modified greenfield approach", where the relevant criteria are assessed under the assumption that the market is not subject to an ex-ante regulation. In light of such an assumption, Nkom does not have sufficient evidence to indicate that Ice could have constituted a competitive third network operator without sector-specific regulation within the next three years. Nor is there sufficient evidence of sufficient market dynamics in subsequent years[2].

The market analysis published on 28 September 2023 was based on the most recently available electronic communications statistics published by Nkom at this time. Statistics for the first half of 2023 were published on 2 November 2023. The updated analysis uses the most recent half-year figures where relevant to supplement full-year figures.

Nkom has otherwise not made any changes to the analysis based on the comments.

4 Market definition

Assessment and conclusions in the market analysis

Nkom has delineated the relevant retail market for private and business customers respectively, and subsequently derived the associated wholesale market. The wholesale market includes wholesale access in all public mobile networks and origination of voice, SMS and data services for the following external forms of access: national roaming, MVNO access, service provider access and co-location. The market is delineated to concern access to offer ordinary mobile services, including mobile broadband services. Access to offer dedicated mobile broadband alone or access to offer M2M/IoT services is not included. Geographically, the market is defined as being national.

Consultation remarks

Telenor maintains its criticism from the May 2023 consultation that erroneous conclusions are being drawn regarding relevant markets. Telenor believes that the market analysis points in the direction of a common retail market, and that there are major shortcomings in the analysis of the relevant wholesale market. In particular, co-location differs from the other forms of access and should be considered more specifically.

Telavox believes that access to mobile broadband and M2M/IoT should be covered by the regulation. Nkom's market analysis is based on a survey of the retail market without taking account of Telenor's

[2] The Commission's recommendation, paragraph 13 [...] An analysis of effective competition implies that the market will become effectively competitive absent ex ante regulation within the period of review, or will do so after that period, provided that clear evidence of positive dynamics in the market is observable already within the period of review: [...]

dominant position regarding the sale of input factors. Telavox believes that the consequence of the regulation that has been announced is that Telenor will be able to place access seekers in a margin squeeze within the area of mobile broadband, without access seekers having any viable alternatives at network level. Insofar as MVNOs should gain access to alternative networks, this could result in reduced volume discounts from Telenor on other products. Telavox therefore argues that it is essential for effective competition concerning mobile services that access regulation of mobile broadband is maintained.

Telavox also believes that the lack of regulation of M2M/IoT entails a risk that access seekers will be placed in a margin squeeze and thus prevented from offering a full portfolio of mobile-based services.

In its comments, **Aller Media** supports Telavox and states that access to mobile broadband and IoT/M2M must be regulated to ensure that MVNOs can compete with their portfolios of mobile-based services.

Nkom's assessment

Telenor supported Nkom's delineation of the retail market in connection with the consultation in May 2023, with the exception of the division between private and business customers. Nkom has considered Telenor's consultation input regarding the delineation of the retail market, but stood by the division. Nkom notes that, in its consultation response, Telenor also points to a number of factors that make it particularly challenging for access seekers to serve customers in the business market, including advanced services and functionality, customer-specific adaptations, plans for the further development of services, etc. Nkom believes that this indicates that there is insufficient substitution on the supply side. Nkom sees no basis for altering the conclusion regarding two separate retail markets for private and business customers respectively.

In connection with the same consultation, Telenor argued that the rationale for including co-location in the same wholesale market as other forms of access was too weak. On this basis, Nkom made further assessments, which are included in section 2.5.1 of the market analysis, and concluded that there is a strong basis for adopting co-location as a form of access within the relevant market. The rationale is primarily linked to the fact that the obligation regarding co-location is a remedy that directly addresses the core problem in the market, namely the absence of infrastructure-based competition. Furthermore, there is support in previous guidelines from the Commission, the Electronic Communications Code and the draft new Electronic Communications Act to include co-location as an access obligation without requiring a separate substitution analysis.

Nkom has also assessed the basis and need to define mobile broadband as a separate relevant retail market. Given the limited scope (around 4 per cent of total revenue from traditional mobile subscriptions and mobile broadband), the declining trend and disciplinary effects from traditional mobile subscriptions, Nkom believes there is insufficient basis for continuing separate regulation for dedicated mobile broadband.

Nkom has not altered its conclusions regarding the market delineation.

5 Developments in the retail market, prices and consumption patterns

Assessment and conclusions in the market analysis

In the analysis, Nkom has concluded that market developments in the retail market, including price developments, do not support the view that there is sufficient competition in this part of the market independently of wholesale regulation. Revenue per customer in the Norwegian market is significantly higher than in the other Nordic countries. This, combined with lower data usage per customer, indicates that price levels are higher in Norway than in comparable countries.

Consultation remarks

Telenor believes that the comparison of usage patterns with other Nordic countries is wrong given that fixed wireless broadband (FWB) is included in the figures for other countries, but not in the corresponding figures for Norway. This imbalance means that data usage in the mobile network in Norway appears to be lower than in other Nordic countries. If FWB traffic, which generates very high levels of traffic (e.g. it accounted for 57 per cent of traffic in Telenor's mobile network in 2022), were to be included in the Norwegian statistics, this would result in a significantly higher figure for overall mobile data usage in Norway.

Nkom's assessment

In Norway, FWB was launched as a replacement product for DSL, and the product differs from the telephony-linked product and other products within Market 15, particularly through the lack of provision for mobility and the requirement for fixed antennae. It is apparent from section 2.4.6 that FWB is not included in the relevant product market at retail level. The FWB product or similar products vary in the countries included in Figure 12 of the analysis, including with regard to whether or not there is a clear distinction between FWB and traditional telephony-linked products, as well as the possibility of mobility and/or fixed antennae. Moreover, the distribution of this type of product varies. The figure shows that, over time, mobile data traffic in Norway has been lower than in the other countries, even before FWB or similar products were launched. Based on the clear trend shown in the figure and the fact that FWB or similar products are relatively new to the market and have varying distributions, Nkom believes that only part of the deviation in recent years could possibly be explained by the fact that some countries have included this type of traffic in the underlying data behind the figure.

6 The market analysis: The three-criteria test and the SMP assessment

Assessment and conclusion in the market analysis

In the notification, Nkom concludes that the three criteria for sector-specific ex ante regulation are met through the market being characterised by high investment barriers, the absence of sufficient clear evidence of market dynamics within the time perspective of the analysis to indicate that the market will tend towards effective competition without ex ante regulation, and the view that general competition legislation alone will not adequately remedy market failure in the relevant market. Furthermore, based on an analysis of market shares and a number of other factors, Nkom has concluded that Telenor could largely act independently of competitors, customers and consumers during the period covered by the analysis. Telenor has therefore been designated as a provider with a strong market position.

Consultation remarks

Telenor refers to the report from Analysys Mason and believes that Nkom has changed the vision without having carried out an updated in-depth analysis. Telenor notes that the relationship between the report and Nkom's market analysis is unclear. In previous analyses, Nkom has stressed that it is through the establishment of a nationwide network that Ice is considered to be a fully-fledged operator. This appears to be something of a moving target given that Nkom now seems to emphasise that a market share of 20 per cent market is necessary in order to be a competitive MNO. Nkom must clearly state the vision that is related to criterion 2 in the test.

Telenor also believes that the basis for claiming that a market share of exactly 20 percent or more is necessary is not particularly robust. Reference is made both to studies conducted 15 to 20 years ago and to the market share and profitability of the third largest operators in certain European countries. The sample of countries appears to be rather random (Belgium, Austria, the Netherlands, Ireland and Finland). Neither Sweden nor Denmark is included. The third largest operators in Denmark and Sweden respectively both have market shares of just under 20 percent and they had EBITDA margins of 17.4 per cent (Telia Denmark) and 36 per cent (Telenor Sweden). It is worth noting thatin 2021, Ice had a profitability (measured by EBITDA margin) in Norway at the same level as Telia Denmark. It is also striking that the spread in profitability for market participants of 20 per cent is very large, from 17.4 per cent to 42 per cent.

Telenor questions whether the report should be afforded as much weight as it has been, as Telenor believes that it is based on outdated and random data and has not been subject to consultation.

Telenor notes that Nkom chooses to afford weight to only certain sections of the report, and not to other section that do not support Nkom's other conclusions.

Telenor stresses that there are already three competitive networks in Norway and notes the following:

- The third operator in the Norwegian market is less dependent on other players than is the case for the third operators in Denmark and Sweden, where there is no regulation in the mobile market. In all Nordic countries, there are variants of network cooperation that result in three fully fledged mobile networks, and Ice's need to supplement its population coverage does not in itself trigger a need for regulation.
- Ice plans to complete its 5G rollout by 2025, i.e. in the middle of the three-year regulatory period. Nkom has not provided any documentation to indicate that this will not take place. Even if Ice were to be delayed somewhat (e.g. by a year), additional population coverage would still be added over the three-year period, and the market structure is tending towards competition. Thus, the second condition for ex ante regulation is not met.

Telenor believes that competition in the wholesale market is strong and increasing, and notes that:

- Nkom has not afforded sufficient emphasis to the significant reduction in Telenor's wholesale share in recent years, as well as the increase in inhouse production by Ice, competition from Telia, and Ice as a potential operator. Telenor is unable to see that denial of access is a genuine problem without regulation. It has been neither documented nor substantiated that Telia or Telenor would cease to offer wholesale access without regulation. Both operators have incentives to fill the networks with wholesale customers for efficient operation. With a more extensive and better network and a higher level of inhouse production, Ice would also have an increasing incentive to start up wholesale sales. In its comments on the consultation response, Telenor further argues that Lyse Tele has both the ability and the desire to establish itself as a competitor in the wholesale market, including with regard to external customers, and refers to statements from Ice which indicate that the company is well underway with the process of building up an organisation internally that will handle wholesale access.
- Nkom primarily assesses market conditions as of 2022 but should have carried out a forward-looking assessment. Expected changes in the market indicate that market concentration at network level during the regulatory period, and in any case over the next five years, will be on a par with Sweden and Denmark when they were deregulated and less than when the corresponding deregulation took place in Finland.

Telenor believes that the analysis of the residential market has shortcomings which impact on both the basis for regulation and the intrusiveness of the regulation. Telenor believes that Nkom has not taken into account that Telenor has seen a significant decline in market share, which now amounts to less than 40 per cent based on customer numbers, which does not normally entail dominance. Based on turnover, the market share is somewhat higher, but Telenor's turnover also includes turnover on additional services, which not all providers offer their mobile customers, so this is not wholly representative of Telenor's competitive position in the mobile market.

Telenor believes that the service competition is much stronger than Nkom assumes in the notification. The number of service providers and their level of success in the market have not been adversely affected by wholesale access terms or lack of opportunities to compete. On the contrary, these providers have proved to be very successful and have then been acquired (especially by Telia), and thus disappeared from the market. In addition, a number of new operators have entered the market and managed to build up customer bases within a relatively short period of time, a trend which must be expected to continue.

Telenor believes that Nkom's assessment of the third criterion is still characterised by an attitude that the competition rules will never be sufficient because Nkom can regulate in more detail. Telenor believes that the market analysis does not adequately assess whether sector-specific regulation is actually necessary and proportionate to the market situation and competitive conditions. Furthermore, Telenor points out that both the ESA and the EFTA Court have established clear requirements as regards margins in relevant markets. It is in the relevant market that competition takes place, and Telenor does not believe there is any basis for Nkom to impose additional requirements as regards margins. Finally, Telenor believes that Nkom underestimates the importance of Section 12 of the Competition Act and the new market investigation tool. The fact that the competition rules also regulate the access obligation indicates that denial of access cannot be regarded as a relevant problem that necessitates further detailed regulation.

Fjordkraft believes that the conditions for access through Telenor set the premises for all other access, including the other network owner that offers access. It is reasonable to assume that, if access had not been regulated, the number of service providers would have rapidly shrunk to zero.

Ice supports Nkom´s analysis that the Norwegian mobile market still qualifies for regulation. Ice believes that the Norwegian mobile market has a significant number of actual competition problems. The dynamics of the market are still characterised by a duopoly situation, where two major operators share more than 80 per cent of the turnover in the market and have a significantly higher EBITDA margin than Ice. In addition, the competitive situation is influenced by the behaviour of the dominant operator. Ice supports the conclusion to designate Telenor as a provider with a strong market position. Ice notes that the final 5 per cent of the population is the most demanding part to develop. It takes about 3,000 base stations to achieve the 95 per cent population coverage that Ice has already developed. For the final 5 per cent, the number of base stations must at least be doubled. Although this figure may seem small in terms of percentage points, this does not mean that the task of developing the network is small. In addition, Ice notes that Norwegian customers have very high expectations regarding coverage. They also travel extensively and expect the coverage to be almost as good wherever they go. In this situation, 95 percent is insufficient, and Ice will not be sufficiently competitive without national roaming while development is continuing. Ice confirms that there are a number of uncertainties regarding the pace of development, including efficient co-location.

Telavox considers the development during this regulatory period to be of some concern. A number of operators have disappeared (Vipps Mobil, Release, Atea Mobil, Norgesenergi Mobil), and more may yet be lost. This development has unfortunately resulted in there being fewer challengers as a result of difficult framework conditions. Nkom documents that Telenor's margins have increased significantly during the current regulatory period, indicating that Telenor's market power has been strengthened. This means that the reduction in market concentration during the period has not coincided with an increase in competition.

Telavox believes that Telenor has deliberately sought to prevent any increase in competition for its operations and refers, inter alia, to the unilateral changes to access conditions imposed by Telenor in 2020, where the Ministry of Local Government and Regional Development upheld Telavox's complaint in a decision made in August 2023.

Telavox considers it completely unrealistic to expect Ice to be capable to acquire the necessary infrastructure to compete effectively as a wholesaler and retailer in the foreseeable future. It is also unrealistic to expect Ice's competitiveness in perceived quality to strengthen significantly in the foreseeable future.

Nkom's assessment

Objectives

Nkom does not agree with Telenor's statements that the objectives has changed. The objective of regulation in Market 15 is effective, infrastructure-based competition; cf. section 6.1 of the notification. It is the assessments in Nkom's market analysis that form the basis for a conclusion as to whether or not this goal has been achieved. Facilitating a third competitive mobile network is an instrument for achieving this main goal. In order for a third network operator to contribute to effective competition, it must have a market position that can create dynamics and help to discipline other operators in the market over time, so that there are no operators with a strong market position. Through the external assignment awarded to Analysys Mason, Nkom has sought to establish a broad approach to determining the characteristics that a competitive player must possess. That market share is one such characteristic is not new, as market share is a key factor in the assessment of criterion 2 and the SMP designation. Furthermore, there is a close relationship between an operator's size, opportunity to exploit economies of scale and profitability, and thereby its scope to invest. These parameters have figured prominently in all of Nkom's previous market analyses.

With regard to the basis for specifying 20 per cent as the minimum market share for a competitive mobile operator, it is not the previous studies that form the pivotal basis for this, but the fact that the studies can be supported by empirical evidence. In this context, Telenor calls for market shares for the third largest operators in Denmark and Sweden respectively in Analysys Mason's report. Telenor

Sweden, which is the third largest operator in Sweden, had a market share of 19.8 per cent of all subscribers at the end of 2022[3] and an EBITDA margin of 34 per cent in 2022[4]. In Denmark, Hi3G, which is the third largest operator in Denmark, had a market share of 18.0 percent at the end of the first half of 2023[5], and an EBITDA margin of 29 per cent in 2022. In addition, Telia Denmark is the fourth largest player with a market share of 14.6 per cent and an EBITDA margin of 20 per cent in 2022. The fact that these third largest operators, who all have a market share of just under 20 per cent, are profitable does little to change the conclusion that Analysys Mason has arrived at that the third largest operator must achieve a market share of at least 20 per cent in order to be competitive. Telenor Sweden also has a network collaboration with Tele2 in Sweden, while Telia Denmark has a corresponding collaboration with Telenor in Denmark, which helps to reduce costs and could impact on the profitability of the companies.

Nkom’s conclusion in the market analysis that there is insufficient clear evidence that the third network would be able to discipline the established players in the market independently of regulation within the time horizon of the analysis is based on a number of factors that are referred to in section 5.2.6 of the analysis.

In response to Telenor's comments concerning the way in which the report by Analysys Mason on effective competition in the Norwegian mobile market is used in the market analysis, Nkom wishes to point out that this was an independent external assessment where Nkom wanted to shed light on a wider picture of competition in the mobile market. The assignment therefore covered questions that extend beyond market analysis, such as technological development over the next five to ten years and long-term infrastructure-sharing on a commercial basis. In the report, Analysys Mason cited the basis/sources that they drew on when carrying out the assignment. In the market analysis, Nkom also refers to various sources that we used as a basis in the analysis which were not subject to separate consultation. The report by Analysys Mason was published by Nkom together with the consultation and could therefore have been commented on. Thus, Nkom is unable to see that there is any basis for claiming that the report by Analysys Mason should have been the subject of a separate consultation.

The fact that Ice is dependent on roaming in established networks in order to offer national coverage to its customers cannot be compared with commercial network collaboration in Denmark and Sweden. The agreements that have been entered into independently of regulation in these countries entail the operators jointly owning infrastructure, rather than a unilateral access purchase with an asymmetric balance of power.

[3] Svensk telekommarknad 2022 (pts.se)

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

[5] Mobil Baggrundsark 1H23.xlsx (live.com)

Ice’s coverage is an important competitive parameter, and the final phase of the development is both challenging and extensive with regard to the number of base stations, as Ice explains in its consultation response. The experiences of both Telenor and Telia also indicate that 5G upgrades have been more time-consuming than first anticipated[6] . The original plans drawn up by both Telenor and Telia for a nationwide 5G network, during the first half of 2024 and by the end of 2023 respectively, will not be achieved. At the end of June 2023, around 35 per cent of Norwegian households had 5G coverage (100 Mbit/s) from two mobile networks, while just over 60 per cent had coverage from one mobile network[7]. This indicates that further development is still needed before nationwide 5G coverage from several networks can be established. Previous experience with network development in Norway also leads Nkom to assume that there are a number of uncertainties associated with the progress being made by Ice's development project.

Competition in the wholesale market

As is apparent from the analysis, Nkom does not agree that there is strong competition in the wholesale market. The competition from Telia is considered in the analysis. Although Telenor has a slightly declining market share in the wholesale market, Telenor has a significantly larger market share than Telia (about 48 per cent compared with 39 per cent in the first half of 2023). Furthermore, section 5.2.5 of the analysis describes how Telia's commercial wholesale offering is disciplined by regulation in many cases and would probably not have been as favourable without regulation. Nkom recognises that providers have incentives to fill the network with traffic, and wholesale customers can be an effective way of doing this. However, wholesale customers also represent a risk of cannibalising one’s own end-customers, which would reduce the incentive for network owners to offer attractive wholesale terms. Experience from this and previous periods of regulation indicates that it is primarily price controls that discipline Telenor's price terms for wholesale access.

In section 5.2.3 of the analysis, Nkom makes forward-looking assessments of market concentration, assuming that market developments over the next few years follow the same trend as market developments since 2015. Based on these assumptions, market concentration will fall towards the levels that prevailed in Sweden and Denmark when these countries gave their markets a clean bill of health within a three-year period. However, such a development is highly uncertain, at least under the assumption that the market is not regulated. At the same time, Nkom expects a certain dynamic during the impending regulatory period and has therefore limited the period to three years.

Competition in the residential market

Nkom also does not agree that the analysis of the residential market is deficient. Telenor's share of subscriptions in the residential market has fallen by around one percentage point per year in recent years, roughly the same as in the total market. Nevertheless, more than 50 per cent of Telenor’s

[6] Telenor bekrefter 5G-forsinkelse: – Planen om å bli ferdig i 2024 var for ambisiøs - Insidetelecom.no

[7] Tilgang til mobildata i Norge (nkom.no) Figure 8

turnover originates from the residential market. Telenor justifies this by saying that the turnover also includes the sale of additional services, which not all providers choose to offer their mobile customers. Nkom discusses this aspect in section 4.1 of the analysis, where it is pointed out that additional services are usually included without any option to opt out, and it is not one of the most important factors considered when choosing an operator for residential customers.

With regard to the conditions for service competition, Nkom notes that there are diffing views among the operators as regards why a number of service providers have been acquired in recent years and whether this is due to their success, as Telenor claims, or lack of success, as other operators have argued (Fjordkraft, Telavox). There is little publicly available accounting information about the mobile operations of these operators (such as Vipps mobil, Gudbrandsdals Energi and NorgesEnergi Mobil). However, Release is an example of a service provider that sold its customer base in 2023. At the time, the company had a negative operating profit.

Nkom does not concur with Telenor's view that a number of new operators have built up customer bases in a short period of time. The largest service providers during the first half of 2023 were Fjordkraft, Chilimobil and Xplora mobile with a 2.0, 1.4 and 1.3 per cent share of subscribers respectively. These operators established themselves in the market in 2017, 2011 and 2016 respectively. Following the merger of Unifon and Nortel, the company will also be among the largest access seekers, with a market share of around 2 per cent based on figures for the first half of 2023. Unifon established itself in 2019 and then took over approximately 13,000 customers from Phonect. Of these operators, only Xplora and Chilimobil have recorded a positive operating profit[8]. Chilimobil did not achieve a positive operating profit until 2022. The figures indicate that it takes time to grow in the Norwegian market. Nkom also agrees with Telavox, which notes that Telenor's profitability during the period does not suggest a significant increase in service competition; cf. section 5.2.4 of the analysis.

The third criterion

Nkom believes that ex ante regulation is necessary and that the notified regulation is proportionate with regard to the competitive situation in the market. Nkom furthermore believes that this assessment has been sufficiently elucidated in the market analysis. Nkom is of the same opinion as before with regard to Section 12 of the Competition Act and the proposed market investigation tool. As regards the market investigation tool, the Norwegian Ministry of Trade, Industry and Fisheries released a proposal for amendments to the Competition Act concerning market investigations for consultation on the 23rd of March 2023. The proposed market investigation tool will enable the Norwegian Competition Authority to implement targeted and effective measures, without the requirement that there must have been a breach of the law. However, it is not clear which approach the Norwegian Competition Authority will take with regard to the challenges in the relevant market, or

[8] Fjordkraft Mobil was established as a separate company in December 2022 and accounting information for the company is thus not available.

when potential measures may be implemented. It is also not clear whether and, if so, when such a market investigation tool will take effect. Nkom notes that the Ministry has so far not published the results of the consultation.

With regard to Section 12 of the Competition Act, Nkom still does not believe that the provision provides a satisfactory basis for solving the competition problems that exist within the market in a sufficiently effective manner.

As for Telenor's comment concerning the fact that both the ESA and the EFTA Court has established clear requirements for margins in relevant markets, Telenor made it clear, in a meeting held on 9 January 2024, that the comment was intended as a reference to the general competition rules, including Section 11 of the Competition Act prohibiting undue exploitation of a dominant position. According to Telenor, this already constitutes a legal framework that Telenor must adhere to. Telenor also made specific reference to the ESA's decision of 21 June 2020, where ESA concluded that, during the period between 2008-2012, Telenor abused its dominant position by pricing services so that competitors would lose money by selling mobile broadband for tablets and laptops.

Nkom therefore understands the comment as a reference to the current competition regulations and previous enforcement of the Competition Act. Nkom believes that the significance of the competition regulations has already been assessed under the third criterion and is unable to see that Telenor has contributed any new aspects to this assessment. On the contrary, Nkom believes that the case relating to ESA's decision of 2020 shows that enforcement of the competition rules, in this case Section 11, is both time-consuming and complex. Nkom points out that Telenor's anti-competitive practices in the case took place over a period of several years (2008-2012) and that a decision in the case was not made until 2020.

Against this backdrop, Nkom finds that there is no basis for reaching a different conclusion concerning the third criterion.

Summary

Nkom has updated the three-criteria test and dominance designation with new statistics and relevant market information. The consultation responses have not resulted in any major changes.

7 Choice of specific obligations

Nkom announced that Telenor would be subject to requirements regarding access, a ban on discrimination between internal and external provision, a standard agreement and requirements concerning price controls and accounting regulations.

7.1 The goal of infrastructure-based competition and the link to service competition

Assessment and conclusion in the decision notification

Nkom still believes that the goal of infrastructure competition between three competitive mobile networks should be the main principle for the regulation and choice of remedies in the market for access to origination in mobile networks. At the same time, there remains a need for regulatory protection for operators which do not have their own network, so that they can contribute to service competition using existing infrastructure.

Consultation remarks

Chilimobil believes that the authorities have focused too narrowly on the establishment of the third network improving competition in the market. From a socio-economic perspective, the focus should instead be placed on establishing a well-functioning resale link that enables providers to engage in healthy competition, giving consumers better services and lower prices. As long as the operators own the entire value chain, it is the operators themselves who control the level of competition. They do this effectively through squeezed margins among the providers who are dependent on leasing networks from the operators. The operators thus deprive the providers in the resale link of the opportunity to engage in effective price competition. As a result, most resellers have substantial operating deficits and are unable to operate profitably. They are then eventually forced to sell their customer bases to the operators.

Telavox believes that Nkom's market analysis is inadequate with regard to the way in which it describes the wholesale market and how competition from service providers and MVNOs plays out in practice. Ice is not an operator that is active in the wholesale market, nor is it likely to become such an operator during the regulatory period. It is MVNOs such as Telavox that make the greatest contribution to increased competition and innovation in Market 15. The focus of the regulation is thus misguided and likely to weaken competition. The regulation should therefore focus on supporting the contributions made by MVNOs to effective competition, rather than an unrealistic objective of competition based on three fully fledged networks.

Ice believes that, based on the input from the above operators, it appears to be very clear that there is a need for three wholesale operators if the market is to become competitive. Access seekers who are dissatisfied with the conditions offered to them should seek other partners. If MVNOs and service providers are actually concerned about better terms and stronger competition in the wholesale market, they should also be concerned about good framework conditions for the third network. Access seekers must accept that the regulation of the mobile market will not last forever. It is in the long-term interests of these operators that Nkom helps to ensure that competition in the wholesale market becomes sufficiently strong and effective to facilitate negotiations with three equally matched providers at the end of the regulatory period. Only this will give these operators effective conditions in a purely commercial market without regulation.

With regard to the suggestion that Ice is unrealistic as a wholesale operator, Ice notes that they are well underway in the process of building up an organisation that will handle wholesale access, and will have both a technical and an actual opportunity to offer a fully fledged wholesale product. Ice strongly believes that combining the expertise from Altibox, Ice and others will make Ice even more powerful and help to strengthen competition in the wholesale market, which in turn will help to increase the number of offers that both Telavox and all the other access seekers can choose between, and thus be part of the solution to the problem outlined by Telavox.

Nkom’s assessment

Effective competition at infrastructure/network level is a prerequisite for a well-functioning resale link, as Chilimobil calls for. This forms the backdrop to the authorities' focus on the establishment of the third network.

The sector-specific regulation will not be perpetual. Nkom recognises that MVNO operators can play an important role in the wholesale market, but regulation cannot be geared towards perpetual facilitation for operators which do not have their own network. Nkom has signalled an expectation of heightened market dynamics in the wholesale sector over the coming three-year period. If so, this could be the last period of sector-specific regulation. On this basis, Nkom does not agree with Telavox that the focus of the regulation is misguided.

Nkom has adjusted section 6.1 of the decision somewhat to prevent ambiguities regarding the objectives of the regulation.

7.2 Access for national roaming

Assessment and conclusion in the decision notification

Among other things, Telenor was ordered to comply with all reasonable requests for access in the relevant market. Requests for national roaming are one of the forms of access that would normally be considered to be reasonable. Nkom furthermore assumed that one- or two-way seamlessness and/or geographical coverage throughout the country will normally also be considered to be reasonable. In the same way, a request to close access to the network in specified areas, or a request to only purchase access in delineated areas, will normally be reasonable. Nkom announced the discontinuation of price controls for national roaming.

Consultation remarks

Telia supports the discontinuation of price controls and accounting regulations for national roaming, as Ice has not had sufficient incentive to continue the development of the third network in the way that the regulation was intended to facilitate. Telia also notes that it agrees that it is unreasonable to provide access to national roaming in geographically delimited areas where the requestor's own network is sufficiently extensive. The current size of Ice's network suggests that requesting geographic coverage would not be a reasonable request. Telia furthermore supports the setting of a clear and explicit end date for the regulation of national roaming, because it is, in Telia's view, necessary for Ice to make sufficient investments in a geographically fully developed and nationwide mobile network.

Ice notes that the company still relies on national roaming to maintain an adequate offering with which to compete in the market. A network with 95 per cent population coverage is not a fully fledged nationwide mobile network, and Ice is therefore not sufficiently competitive without national roaming while the expansion is in progress. At the same time, Ice supports deregulation as the mobile market develops in a positive direction, and the price controls form a natural starting point. However, Ice has concerns about whether the access obligation will be sufficiently effective without associated price controls. Ice has experience of negotiations with both Telenor and Telia concerning agreements for national roaming on commercial terms. This process has proved difficult, and Ice has so far not had sufficient bargaining power in the face of two operators which have no competition-related incentive to enter into an agreement concerning national roaming. When negotiating prices and terms of access, the absence of sufficiently clear rules and guidelines could lead to negotiations becoming protracted or the parties not reaching agreement. Ice stresses the importance of strict and effective enforcement of the access obligation.

Ice refutes Telia's comments regarding the lack of incentives for development. Ices' financial performance in recent years is clear evidence that national roaming is not particularly commercially attractive. Ice has had ambitious development plans in place for many years, but these plans have proved difficult to implement due to the very challenging conditions in the capital market. With Lyse as the new owner of Ice, a strong focus has once again returned and the pace of development has accelerated. The Market 15 regulation has been and remains a crucial instrument for ensuring the rapid and efficient roll-out of the third network. To ensure that Ice is sufficiently competitive during a development phase, access to national roaming will be absolutely pivotal. The weakening of Ice during this phase would benefit Telenor and Telia and exacerbate the already problematic competitive situation in the Norwegian mobile market. Ice also stresses that the development of the third network is based solely on commercial considerations, as the plans and timelines have also been presented to Nkom. In other words, it is not the time horizon of the regulation that impacts the pace of development, as Telia claims.

Nkom's assessment

Nkom signalled the discontinuation of price controls for national roaming in its decision of 14 May 2020 in order to provide incentives for efficient development. Nkom stood by this assessment in the notification of the new decision, and also noted that the scope of access purchases will be relatively limited and declining over the coming years, with the consequence that the financial risk to Ice will be limited. Nkom sees no basis for revising this assessment, but will closely monitor any negotiations concerning access for national roaming. It follows from section 7.1.9 of the decision that Telenor must negotiate all agreements concerning access and call origination in Telenor's mobile network without undue delay. Concerning any claim of delaying tactics, Telenor must send Nkom a copy of Telenor's response upon request for documentation of the time spent.

As regards the geographical delineation of national roaming, Nkom's starting point has been that access to national roaming with geographic coverage throughout the country is normally reasonable. However, section 7.1.3 of the notification states that, depending on the scope of the requestor's own network, access in geographically delineated areas may also be sufficient. Nkom believes that a more detailed assessment of a reasonable request in connection with the geographical coverage area for national roaming must depend on a specific assessment in each individual case. The decision establishes the framework for an assessment generally, while the specific assessment must take account of factual circumstances at the time of the request.

Nkom has not set an explicit end date for the access obligation. This must be done on the basis of an updated market analysis. However, Nkom has signalled an expectation of market dynamics within the forthcoming decision period which will require a new analysis within three years from the date of the decision.

Based on Telia's consultation response, Nkom has clarified the text in sections 7.1.3 and 7.1.9 stating that determining whether geographical limitations of national hospitality should be deemed to be reasonable must depend on a specific assessment in each case.

7.2.1 More information about the access obligation

Assessment and conclusion in the decision notification

Nkom has announced that Telenor will be ordered to comply with all reasonable requests for access in the relevant market. Requests for national roaming, MVNO and service provider access and co-location will normally be deemed to be reasonable. In the notification, Nkom has set out the conditions for the access obligation in more detail.

Consultation remarks

Telenor believes it is unclear what the new requirement that changes to access agreements must pass the margin test in a forward-looking perspective will entail. It is also unclear to Telenor why the requirement is necessary, and the company believes that Nkom has neither explained nor justified the need for a new way of reporting margin requirements. It seems to Telenor that it is unclear exactly which competition problem will be solved through the requirement to pass the margin test in a forward-looking perspective, which has not already been solved through the current margin squeeze requirement. In Telenor's view, the requirement should be removed.

Telia considers a migration period of up to 12 months in the residential market and 24 months in the business market to be a very long migration period. A long migration period could lead to an extension of the agreement, which in turn could lead to increased costs by deferring required system changes. In addition, the notice period is not exclusive, which will give the access seeker a long time window with the possibility of operating on two networks. Telia has found that service providers can switch networks within three months. MVNOs do not require a change of SIM card and can carry out switches between operators significantly faster.

Telavox believes that the current regulation is not sufficiently precise and that market participants face uncertain framework conditions as a result. The impending regulation should be put into more concrete terms and clarified, so that Telenor cannot exploit any ambiguities to its advantage.

Telavox believes there is a need for clarification and perhaps some examples of what is meant by Telenor being able to implement unilateral changes in exceptional cases. It is desirable to have a concise clarification of the timeline in the event of potential changes in prices or other terms, i.e. a specific overall timeline (figure or similar) should be stipulated concerning when notification must be given, how long the notification is valid for, within what time frame the negotiations and agreement must be concluded, what obligations Telenor is subject to as regards documentation, etc., as this is not clearly stated in the notification.

Nkom's assessment

Based on input from a number of access seekers regarding unpredictable changes to Telenor's access agreements under the current regulation, Nkom has identified a need to set out additional requirements regarding Telenor's right to implement unilateral changes. On this basis, Nkom required unilateral changes in individual access agreements to be based on clear and verifiable conditions, and that the changes had to pass the margin squeeze test both at the time of the change and in a forward-looking perspective. Following an assessment of Telenor's input, Nkom believes that the purpose of greater predictability can be fulfilled without the requirement for a forward-looking margin squeeze test as notified previously. It is sufficient that such changes pass the margin squeeze test at the time in question, and that Telenor documents the consequences of the change in a forward-looking perspective. Nkom thus expects any changes to pass the next margin squeeze test as well. The purpose of this requirement is to prevent price changes for which there is no long-term basis.

Nkom also believes that the requirements for the unilateral right to implement changes have been sufficiently clarified and exemplified. Further exemplification of specific conditions that an agreement may contain is not necessary at the present time if the requirements that already follow from the regulation regarding this point are followed. However, Nkom will consider tightening this up at a later date if the requirements for the unilateral right to implement changes do not have the intended effect.

In Nkom's opinion, it is also not necessary to include a requirement for a timeline for unilateral or any other changes. The requirement for notification already follows from the regulation, and Telenor is obliged to notify the access seeker two months in advance in the event of a change to the detriment of the access seeker. In the case of changes other than unilateral amendments, the starting point according to the regulation is that the changes must be negotiated and agreed. In such cases, Nkom believes that it should be up to the parties in question to decide when the change will take effect. Telenor is required to document that the condition for implementing a unilateral change to the agreement has been met. This requirement is clarified in the decision.

With regard to the requirements concerning migration and migration period in the Market 15 decision, these are not intended to extend the duration of an access agreement. The requirements regarding migration and migration period are intended to safeguard the access seeker's need to be on two networks at the same time while switching between two operators. Once the agreement has expired, the access seeker does not have the same need to do this, and the need for predictability does not apply in the same way. Thus, Nkom does not concur with Telia’s view that the requirements regarding migration and migration period will extend the duration of agreements and entail added costs.

Based on the consultation comments, Nkom has made some written adjustments relating to the obligations in section 7.1.8.4 on migration and section 7.1.8.6 on the right to implement changes to individual agreements.

7.2.2 Access to co-location

Assessment and conclusion in the decision notification

Nkom announced that Telenor would be required to comply with reasonable requests for co-location within the relevant market. 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.

Consultation remarks

Telenor notes that businesses in the co-location market are set up as separate companies with their own commercial targets, and denial of access is therefore no longer likely. In its comments on the consultation responses, Telenor points out that Nkom has not taken into account that Altibox/Lyse’s Tårnselskapet is planning to construct 600 towers to which they will also provide third-party access. Telenor believes that the demand for access to Telenor's towers is significantly less than Nkom assumes. It also shows that Lyse Tele now has sufficient capital to make this type of investment on its own.

Telia supports the continuation of access regulation.

Ice states that, although the pace of development is high, it is linked to a number of uncertainties, including co-location. Telenor is a dominant mast owner in the part of the country where Ice is planning further development in the future. Ice has found that, although Telenor has a positive attitude towards co-location requests, a lack of resources relating to co-location leads to long processing times. This could delay the development of the third network and thus extend the time horizon during which Ice will continue to have a need for national roaming.

To clarify what constitutes an acceptable amount of time to spend on the preparation and completion of a placement, Ice proposes that the following clarification be added to section 293: *"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 a placement proposal, the placement preparations must be initiated and carried out without undue delay. Clarifications that do not require third-party clarifications should normally be completed within six weeks. Clarifications requiring third-party clarifications should normally commence within four weeks."*

Telenor notes that this will mean that Telenor Infra will be required to maintain staffing levels that are neither determined by sound business principles nor a socio-economically efficient use of resources. Telenor Infra took steps to increase processing capacity in the second half of 2023. Telenor also argues that the proposal is problematic with regard to major development/upgrade programmes, such as Kjerag, where sites are ordered in large "batches" of 200 sites at a time, for example. It then becomes unrealistic to process all these sites in parallel due to capacity constraints at every level (both within Infra and among subcontractors).

Nkom's assessment

Nkom does not consider absolute denial of access for co-location to constitute a major risk, but competition problems such as stalling, discrimination and exploitative prices could nevertheless be potential competition problems; see chapter 5 of the decision. Despite the fact that the tower company in the Altibox collaboration is planning to erect 600 new mobile masts, this does not cover the remaining need for a national third network. It is noted that, in its consultation response, Ice states that the remaining development will require at least 3,000 base stations. In some areas, there are no alternatives to co-location, as it is not possible to build more masts for geographical or political reasons. The need for co-location therefore remains.

Under the current regulation, the requirement for preparation and implementation is that this must be initiated and carried out without undue delay once the placement proposal has been accepted. Nkom considers it difficult to specify more detailed requirements regarding when placement should normally be completed by, as there are considerable variations involved as well as a dependency on factors such as third-party clarifications, the need for capacity expansion, access to resources, etc. Nkom is also aware that the number of requests that Telenor receives over the course of six months varies considerably, which makes it challenging to dimension capacity. On the other hand, unnecessary stalling must be avoided, and Nkom will thus require Telenor to document the time spent on the preparation and implementation of placement at the request of the access seeker. Furthermore, Nkom will monitor the time spent through the six-monthly reports on co-location. In the event of signs of stalling, Nkom will consider specifying additional requirements.

Based on the consultation input that has been received, Nkom has adjusted the requirements for documentation of time spent on the preparation and implementation of placement in sections 7.1.6 and 7.1.9 of the decision.

7.3 Non-discrimination

Assessment and conclusion in the decision notification

Nkom announced that Telenor would become subject to a non-discrimination obligation between internal and external provision.

Consultation remarks

Telenor welcomes Nkom's abolition of the requirement for non-discrimination between external parties. However, Telenor believes that the ban on discrimination between internal and external provision limits the company's incentive and ability to enter into individual price agreements, and recommends that the requirement for non-discrimination only be applied to the standard agreement.

Nkom's assessment

Telenor's input has been assessed together with other input regarding alternative individual agreements in section 7.5.3. On the basis of this assessment, Nkom has decided to clarify the obligation to ensure non-discrimination as regards agreements that deviate from the terms of the standard agreement.

7.4 Standard agreement

Assessment and conclusion in the decision notification

Nkom announced that Telenor would be subject to requirements regarding standard agreements. The requirements included Telenor involving access seekers, obtaining their views and taking into account their needs in the event of major changes to the standard agreements.

Consultation remarks

Telenor considers the obligation to involve access seekers in the event of major changes to be unclear**.** The company argues that, because the standard agreement does not regulate an individual contractual relationship and changes to the standard agreement do not apply to existing access seekers who have entered into an individual agreement, it is difficult to understand how changes to the standard agreement could affect existing the business models or investments of access seekers. Telenor asks Nkom to clarify the relationship between the standard agreement and individually concluded agreements based on the standard agreement, and who it is that must be consulted in the event of changes to the standard agreement.

Nkom's assessment

The standard agreement regulates the conditions that Telenor lays down for access to Telenor's mobile network. Because the standard agreement establishes the long-term framework for access, the importance of the content of this agreement for access seekers extends beyond the access agreement that they have signed. To ensure that the framework for access to Telenor's mobile network is predictable, it is necessary to also limit Telenor's right to implement changes to the standard agreement. However, the restriction must not be too severe, so that Telenor can retain the latitude that the company normally has to amend and adjust the content of the standard agreement. However, the limitation is that Telenor cannot implement major changes to the standard agreement. As the standard agreements will reflect the products and services that the access seeker may fall back on, it is important that changes that affect the access seeker's ability to compete in the market are not implemented before the access seeker has become involved. Thus, the regulation requires Telenor to involve access seekers before implementing such changes.

The obligation to involve access seekers is retained in the decision in its entirety. Nkom has nevertheless elaborated on the reason why the regulation imposes such a requirement, so that the purpose of the provision is clearly stated.

7.5 Price and accounting controls

7.5.1 General

Assessment and conclusion in the decision notification

Nkom has announced that Telenor will be required to offer MVNOs access at prices which entail that the access seeker will not be subject to margin squeeze. Telenor must pass a portfolio-based margin squeeze test of retail products. In the case of service provider access, Telenor must pass a gross margin test for a selection of Telenor's retail products.

Consultation remarks

Telenor believes that the proposed regulation represents an intrusive and detailed regulation of service access (SP and MVNO) which promotes service competition and not infrastructure competition. A regulatory strategy that seeks to promote service competition through ever stricter regulation, only for service players to be acquired by network operators (especially Telia), is an ineffective way of achieving the goal of promoting network competition. Such an approach reduces the ability of the third network to gain market share downstream, and also reduces the incentive to enter the wholesale market. Telenor notes that Ice recorded greater customer growth than access seekers during the period from the first half of 2016 to the first half of 2020. However, following Nkom's tightening of price controls in the decision of 15 May 2020, access seekers have experienced more customer growth than Ice. From this situation, Nkom proposes further tightening of the regulation of service access.

According to Telenor, the regulation is disproportionate and extends further than is necessary. Nkom should now have relaxed this to a significant extent in order to promote structural network competition.

Ice finds it difficult to compete for wholesale customers and that the price controls for MVNO and TL do not offer any incentives for access seekers to consider other networks. Citing the deregulation of national roaming, Ice notes that service providers and MVNOs have access to three different operators, and that Ice is unable to see that those markets should be treated any differently in the regulation.

Ice also points out that the regulation does little to stimulate innovation in the MVNO and service provider market. In addition to "Telenor coverage", price is a recurring theme in the marketing aimed at access seekers. Very few providers focus on what value-added solutions are being offered, and Ice believes that this could indicate that there are insufficient incentives for access seekers in the regulation to compete by offering customers the best solutions.

Telenor supports Ice's input in comments on the consultation responses.

Chilimobil believes that the current margin squeeze test does not ensure effective margin levels at the resale level. It is therefore not a useful tool for generating profitability, but it does protect the scope of network owners to dampen competition in the retail market. The recent trend in the market has been for operators to increase their retail prices, while at the same time recording ever-higher profit margins.

Fjordkraft submitted the following input regarding the margin squeeze regulation:

- A positive gross margin is not sufficient to enable service providers to operate profitably. It is not possible to operate profitably when all sales revenue goes to the network owner. ‘Gross margin’ must be defined by a magnitude that enables service providers to operate profitably.

- Alternatively, a full margin squeeze test must be used for service providers. The difference between service providers and MVNOs is too great as regards price controls. The costs attributable to marketing, sales, and customer service are significantly higher than the added complexity, technical equipment and software that comes with MVNO access.

According to Fjordkraft, the key point is that there must be a theoretical opportunity for service providers to operate profitability, if activity in this form of access is to continue. It is too risky to base the entire establishment of a service provider on the assumed value of selling the customer portfolio back to one of the network owners after a period of time.

Nkom's assessment

Nkom notes that there are conflicting views regarding whether or not there is a need for price controls for MVNO and service provider access, and whether the announced price controls offer the right incentives and are correctly balanced.

Telenor believes that the adjustments to the price controls for MVNO and service provider access adopted by Nkom in 2020 have made it more difficult for Ice to grow, and that the adjustment to the margin squeeze test that has been announced will further adversely affect opportunities for growth. Nkom agrees with Telenor that Ice saw stronger organic growth measured in terms of subscriber numbers during the period before the first half of 2020 than during the subsequent period. Figures from Ekomstatistikken show that Ice recorded particularly strong growth from the first half of 2016 through to the first half of 2018. However, from the first half of 2018 to the first half of 2020, growth was at a lower level and below the growth seen during the period after the first half of 2020. Primarily through organic growth, as well as the acquisition of a number of service providers, Ice increased its market share in terms of subscriber numbers from 2.5 per cent to 13.6 per cent during the period from the first half of 2016 to the first half of 2023. By way of comparison, total market share measured in terms of the number of subscriptions for other access seekers declined from 10.3 per cent at the end of the first half of 2016 to 9.5 per cent[9] at the end of the first half of 2023. During this period, the total market share for this group varied from just under 6 per cent to just over 10 per cent. This is partly due to the fact that some access seekers have been acquired by network owners and that new providers have become established. The number of access seekers also fell slightly during the period. The fact that some have opted to divest their customer base and discontinue their mobile investment may be due to either business strategy or a lack of profitability.

In Nkom's opinion, the growth seen by Ice and other access seekers in the market will be affected by numerous factors other than price control, including the companies' business strategy and financial situation. Nkom does not agree with Telenor that developments in the market indicate that the price regulation of service provider and MVNO access has led to excessively favourable terms and that this

[9] Including Fjordkraft, which is 39 per cent owned by Telia.

has made it difficult for Ice to grow, or that the changes announced concerning the margin squeeze test will have this effect. The comments from Chilimobil and Fjordkraft support this.

The competition to offer attractive terms of access for MVNOs and service providers has not changed significantly since the previous market analysis. In its consultation response, Ice states that the company is in the process of developing a wholesale business, but so far the company only has internal sales in the retail market. Nkom therefore believes that there is a need for access terms that enable MVNOs and service providers to compete in the retail market until sustainable and effective infrastructure-based competition has been established in the wholesale market.

The method for price controls has been carefully considered by Nkom with the aim of balancing the need to enable external operators to compete on established infrastructure and contribute to price competition in the retail market, while at the same time ensuring that a window of opportunity is created for the third network to compete in both the wholesale market and the retail market. In this market situation, the prohibition against subjecting the access buyer to margin squeezing is a suitable form of price control which helps to mitigate the identified competition problems and balances the conflicting considerations. Nkom refers to the supplementary account in section 7.5.2 of the decision.

As regards Ice's comments that it is difficult to compete for wholesale customers, it is Nkom's view that positive gross margin requirements for service providers and positive margin requirements in the full margin squeeze test for MVNOs are the least that must be offered to access seekers to enable them to compete in the market. Ice must also expect wholesale products to be offered at a price level that facilitates competition. Nkom also expects increased competition in the wholesale market in order to promote innovation in the retail market, so that competition does not solely revolve around price.

With regard to the 2020 decision, service providers also argued that the gross margin test had to have higher margin requirements, or alternatively that the full margin squeeze test should be applied to service providers. Nkom adheres to the design of the price controls for service providers. The adopted method (gross margin per product) seeks to ensure that service providers are not excluded from any niches in the market through the fact that the test is performed on a per-product basis. This is based on the view that service providers may also have a somewhat lower threshold for entering the market by being targeted at a limited segment of the residential or business markets. The test is conducted per product, and all tested products must have a gross margin greater than zero. Nkom's tests indicate that, in practice, the margin per product varies from slightly positive to certain products which achieve a gross margin of 70-80 per cent. Thus, not all products have a gross margin of zero. Establishing oneself as a service provider requires relatively limited investment, and in the event of withdrawal from the market, the customer base that has been built up can be divested. Nkom believes that a requirement for a positive gross margin constitutes an adequate safety net for this form of access. However, the requirement for a positive gross margin still imposes requirements on service providers, who have a limited product portfolio, to operate their retail business very efficiently, for example by leveraging established distribution channels and existing customer groups. On this basis, Nkom does not agree with Fjordkraft's argument that price controls do not provide any opportunity for service providers to operate profitability.

In summary, Nkom believes that the price controls announced for MVNO and service provider access balance the need for service competition against the need for investment incentives and infrastructure-based competition. Nkom believes that the margin squeeze test as it has been imposed is necessary to ensure that operators without their own network can obtain price terms that make it possible to compete in the retail market. Nkom thus believes that the price controls are proportionate. The consultation comments have not provided any basis for changes in the choice of method regarding price controls.

7.5.2 Margin squeeze tests

Assessment and conclusion in the decision notification

Nkom announced detailed principles for the margin squeeze tests which largely continue the principles behind the 2020 decision. However, Nkom announced a lower aggregation level for testing products in the business market than Telenor has previously assumed in the case of full margin squeeze tests. On behalf of Nkom, Analysys Mason has updated the retail costs in the model.

Consultation remarks

Telenor believes that the assumption of a market share for tested operators of 3 percent in the residential and business markets is unreasonable. The conclusion not to continue mobile broadband as a relevant retail market means that smaller operators will be tested in the margin squeeze tests than was previously the case. Telenor also points out that some access seekers have achieved a market share of more than 3 per cent. In less than three years, Nortel has achieved a market share of 3.7 per cent in the business market, while Fjordkraft has achieved a market share of 3.18 per cent in the residential market. The wholesale customers of Telavox, which is a facilitator and reseller in the retail market, have a combined market share of around 6 per cent of the total market.

Telenor also believes that the estimates for fixed and variable retail costs in the residential and business markets estimated by Analysys Mason on behalf of Nkom are unrealistic. Based on these costs, costs incurred by a modelled operator the size of Chilimobil would be more than three times those of Chilimobil. Furthermore, Telenor considers it remarkable that its estimates for fixed costs are simply dismissed without further assessment. Telenor's estimates were based on the total costs incurred by Happybytes AS in its first full year of operation (2019). In Telenor's view, these costs prove that Nkom's assumptions regarding fixed costs are unrealistic. Moreover, Telenor does not agree with Analysys Mason's assumption about estimating the variable costs based on cost information from Telenor for the years 2020-2022, including the rationale for not including cost data for 2019 in the basis.

Telenor notes that, under the current regulation, Telenor must pass a gross margin test for all relevant calling plans, including “Bedrift Total”. It is difficult to see how it could be proportionate to introduce a new burdensome and detailed margin test for seven segments of the product “Bedrift Total”. Defining such narrow customer segments is inappropriate and would be detrimental to both business customers and access seekers. Nkom has also not considered whether the effect rather points to inefficient establishment instead.

Telenor believes that there is strong competition for the largest business customers. Insofar as it is challenging for access seekers to serve the largest business customers, there are other reasons than Telenor's wholesale prices, including demanding requirements concerning service and support, future coverage expansion, advanced services and functionality, customer-specific adaptations, clear roadmaps with plans for further development of current services, the ability to support customer needs to become more environmentally friendly and sustainable, and last but not least, credibility as a competent advisor across an ever-changing spectrum of technological possibilities.

Telenor notes that there are very few customers in the uppermost segments of Bedrift Total. Telenor's obligations may therefore be influenced by the choices made by individual customers, which appears to be disproportionate. It is unreasonable for a segment to consist of so few customers. If, despite this, Nkom maintains that there is a need for further segmentation in the follow-up of the margin requirement in the business market, there should be fewer segments than stated in the proposal, and it should be ensured that each segment consists of at least 100 customers.

Telavox disagrees with the procedure to determine which retail products should be included in the margin squeeze test. The company believes that the margin squeeze test is based on an outdated portfolio that does not represent the products that Telenor actually markets and competes with. In Telavox's view, the test should be based on a selection of new subscriptions, i.e. products that Telenor actively offers in the market. For example, the test could have been based on 70 per cent of the number of new subscriptions during the last month, as well as products that account for at least 10 per cent of new subscriptions during the last month, rather than 70 per cent of subscriptions in each of the retail markets, as well as products that account for at least 10 per cent of subscriptions in relevant retail markets.

Telavox also believes that the test omits relevant costs that an equally efficient wholesale operator would face in competition with Telenor. As a minimum, this can be taken into account by giving high-volume operators a volume discount, as these operators take over many of the cost elements that Telenor would alternatively have had.

Nkom’s assessment

Nkom does not concur with Telenor’s view that the assumption of a market share of 3 per cent for the reference operator in the margin squeeze test in the residential and business markets is unreasonable. It is true that the decision not to continue mobile broadband as a relevant retail market means that somewhat smaller operators will be tested than was previously the case. Based on figures from Ekomstatistikken for 2022, the number of subscriptions for the reference operator will be reduced by just over 4 per cent. Due to the fact that, as a result of this, the fixed costs and revenues are distributed between fewer subscriptions, this change will, when taken in isolation, reduce the net margin test somewhat (-0.24 per cent and -0.85 per cent in the residential and business markets respectively). However, with the assistance of Analysys Mason, Nkom has also updated the estimated retail costs in the test. Part of the reason behind this update is that mobile broadband will no longer be included in the margin squeeze test and that retail costs relating to mobile broadband will therefore no longer be included in the basis. In the notification, Nkom has further clarified that revenues and costs relating to mobile broadband will cease to be covered by accounting separation. Other revenues and expenses, as well as revenues and expenses from the sale of handsets, are included in the margin squeeze test and updated annually based on accounting separation. The fixed revenues and costs that will be included in the tests in the future are thus lower than they would have been had mobile broadband been included in the test. The effect of testing a somewhat smaller operator than previously is small and largely offset by the fact that revenues and costs relating to mobile broadband are no longer included in the test. The changes can hardly be said to constitute a tightening of the regulation.

Telenor also notes that some MVNOs and service providers have achieved a market share of more than 3 percent during the current period. 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 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. Some access seekers have also achieved a higher market share than the assumed market share for the reference operator in the margin squeeze test in previous regulatory periods. The three operators referred to by Telenor have to some extent achieved their market share through the acquisition of other service providers. There are also a number of operators who have been present in the market for many years who have not achieved such a market share. The total market share of access seekers has increased by just under 3 percentage points during the current period. However, compared with the total market share of this group during the first half of 2016, there has been a marginal decline. Furthermore, as noted above, the number of access seekers declined somewhat during the period. As stated in the notification, Nkom believes that market developments indicate that it is challenging for access seekers to achieve high market shares and that regulation should be designed to facilitate efficient providers starting out without a significant market share. Nkom is unable to see how the assumption of a 3 per cent market share for the reference operator in the margin squeeze test is unreasonable.

Telenor's input regarding the determination of fixed and variable costs in the margin squeeze test is assessed by Analysys Mason on behalf of Nkom in Annex 8 Margin squeeze model responses to feedback. Nkom endorses this assessment.

Nkom does not agree with Telenor that there is no basis or that it would be disproportionate to split Bedrift Total into smaller segments when performing the margin squeeze tests. Nkom has over a prolonged period of time seen that competition in the business market is limited. Telenor has a particularly high market share and stable position in this part of the retail market. Report No. 28 to the Storting (2020-2021) "Vår digitale grunnmur" also stresses that the government will facilitate greater competition in the business market for mobile services, particularly in the SMB segment. The purpose of price controls concerning service provider access is to ensure that access seekers who focus their business operations on a small part of the retail market are at least assured of a positive gross margin.

When performing the ordinary margin squeeze tests in spring and autumn 2023, Nkom also conducted additional tests where "Bedrift Total" was divided into the seven segments that are referred to in the decision. Telenor is thus already aware of how this division is done and has provided the requested data at this level of aggregation on several occasions. Nkom is unable to see that the division of Bedrift Total is unreasonably burdensome. At the time of the last margin squeeze test in autumn 2023, each of the seven segments of Bedrift Total contained more subscriptions than the smallest ordinary business product included in the test for the business market. Nkom is also unable to see how splitting Bedrift Total could be detrimental to business customers and/or access seekers, or that it could lead to inefficient establishment.

Furthermore, Nkom does not concur with Telenor's view that each of the segments should consist of at least 100 customers. Telenor's largest business customers have many subscriptions, and such a limit would result in a reduction in the number of segments from seven to five (the top three segments would be merged). The uppermost segment (the top 100 business customers) would then account for no less than [redacted] percent of subscriptions under Bedrift Total and have a weighting of [redacted] in the margin squeeze test for the business market. Customers with between [redacted] subscriptions would be included in the segment[10]. Such a minimum limit on the number of customers would result in one segment being much larger than all the other segments measured in terms of the number of subscriptions, and this segment would contain customers of very different sizes and very different prices and margins. In Nkom's view, this would counteract the purpose of price controls concerning service provider access.

Nkom does not agree with Telavox that the margin squeeze test is based on an outdated portfolio that does not represent the products that Telenor actually markets and competes with. It is apparent from Annex 2 Principles for margin squeeze tests in Market 15 that, when assessing whether retail products are considered to be representative of the competition situation in the market, weight must among other things be afforded to whether the product is for sale, whether the product is offered to new customers at a promotional price, and whether the access seekers have equivalent products that

[10] Based on data from Telenor reported in autumn 2023.

directly compete with Telenor's product. At the time of the previous margin squeeze test, which was conducted in autumn 2023, all products included in the test were actually for sale. A clear majority of these products had shown growth in the number of subscriptions during the six-month period leading up to the test, accounting for around 85 per cent and 71 per cent of the number of subscriptions in the tests for the residential and business markets respectively. Of the remaining products included in the tests, it was primarily mobile broadband products that saw a decline in the number of subscriptions. Other products had a relatively stable number of subscriptions during the period.

The consultation comments have not provided any grounds for amending the principles for margin squeeze tests. However, Nkom has made some adjustments to the estimates for retail costs as a result of the consultation input. The results are set out in Annex 5 Model manual.

7.5.3 Requirements regarding price structure

Assessment and conclusion in the decision notification

Nkom announced that Telenor would be required to comply with reasonable requests for alternative price structures. In order to open up opportunities for individual negotiations, Nkom announced that Telenor would not be subject to a ban on discrimination between external buyers, as regards either prices or other terms. However, the general requirements regarding access set out in section 7.1.9 would apply to alternative price structures. Nkom also announced that the ban on discrimination between internal and external provision would apply to all forms of access and agreements.

Consultation remarks

Telenor considers it to be somewhat unclear what obligations actually apply to individually negotiated agreements. Telenor believes it is crucial that negotiated agreements that deviate from the standard agreement are not subject to the special obligations in the regulation and cites the following examples:

- The requirement for a relative price level between different forms of access will render it impossible to negotiate a service provider agreement with a discount scale that is more attractive than the standard agreement for MVNOs.
- The ban on discrimination between internal and external provision will limit the company's incentive and ability to enter into individual price agreements. This could for example be fixed-price agreements or price agreements with a price adjustment clause. Such agreements will typically have different expected margins during the agreement period, and Telenor and the access seeker will be exposed to a price risk relative to the regulated price level. If an individual price agreement has to fulfil the requirement for non-discriminatory prices for every single year of the contractual relationship, this will mean that the agreed prices will constitute maximum prices for the access seeker concerned, and Telenor will not be assured the agreed

prices during the agreement period. This mismatch in risk will reduce Telenor's incentive to enter into agreements concerning an alternative pricing structure.

- Furthermore, the same ban will constitute an obstacle to offering an operator that wants access to fewer technologies or fewer services in order to obtain a reduced price, e.g. access to 4G only.

If Telenor is to offer operators a more individually tailored price structure and better prices in return for taking on obligations that deviate from the terms of the standard agreement, it is essential that the operator must then comply with the negotiated terms and conditions and be unable to complain to Nkom or have certain aspects of the negotiated agreement cancelled or amended. The Competition Act also ensures that no terms can be agreed that would be in contravention of Section 11, prohibiting abuse of a dominant position. Telenor recommends that the requirement for non-discrimination only be applied to the standard agreement. Telenor asks Nkom to confirm that only the minimum requirements in 7.1.8 will apply to individually negotiated agreements**.**

Fjordkraft argues that the regulation must enable service providers to offer products that satisfy the desire of customers for larger data quantities (e.g. free data). The proposed regulation has addressed the challenges associated with the price model for access purchases, and it is positive to see that it will be possible to negotiate the price model with Telenor. However, there is considerable uncertainty as regards what can actually be achieved in such negotiations. Access seekers are thus excluded from the most attractive part of the market.

Telenor still has the power to define the price model for access seekers. There is currently no link between the price model for access purchases and the standard product for the customer. This entails a considerable risk for access seekers. Given that data volumes have also been priced very degressively, i.e. so that the prices for the first small volumes of data are set very high, and that the possibility of bulk purchases has been stopped, then it is not possible to challenge Telenor on product/price. Telenor should be required to offer a standard agreement where the structure of the cost elements reflects the products that are actually sold to end-customers. It is pointless to price voice, SMS, and MMS per volume when this price model describes a reality that the industry abandoned many years ago.

Ice believes that alternative price models will represent an opportunity for Ice to differentiate itself from Telenor's wholesale offering. Ice believes that requiring Telenor to offer alternative price models limits the company's ability to establish itself in the wholesale market. In this way, MVNOs and service providers can secure "Telenor coverage" with a regulated price and pricing structure, significantly reducing the need to look for other providers. Wholesale customers must be incentivised to enter into a dialogue with providers other than Telenor's. Ice believes that the regulation should actively support this by offering the same regulation for access for national roaming, MVNOs and service providers.

Telavox argues that volume discounts are crucial to ensuring effective competition at both wholesale and retail level and must be continued in the forthcoming regulation. Telavox is unable to see how the market decision that has been announced requires Telenor to offer volume discounts and asks that this be included in the regulation. Telavox also believes that the conditions for alternative price structures, such as bulk pricing, must be put into more concrete terms. The market decision that has been announced does not adequately explain what constitutes a "reasonable request" for a different price structure. There is therefore a considerable risk that Telenor will not comply with requests for alternative price structures from Telavox or other MVNOs. Furthermore, Telavox is of the view that relaxing the requirement for non-discrimination between external enterprises will not be sufficient to ensure alternative price models.

It seems paradoxical that Telenor is assumed to voluntarily offer access seekers price structures that enhance their competitiveness in the wholesale and retail markets given that the notification also concludes that Telenor is not disciplined by buyer power in negotiations with its customers.

The regulation must also specify a minimum requirement for alternative price structures, including bulk pricing, so that this can form a starting point to which market participants can relate. A reasonable request for bulk price would be

- Bulk pricing must be an alternative to standard terms with variable prices and volume discounts, and any consumption in excess of the bulk volume should be made available to purchase in accordance with the standard terms.
- The relevant bulk price period must be between nine and twelve months.
- Telenor cannot set lower or upper limits on the volume that is purchased.
- To compensate for the access seeker assuming risk compared with the standard terms, the total price of the bulk must be below the variable standard price less all discounts.
- The relevant discount on the bulk price must be based on a realistic assessment of how much risk the buyer is actually assuming compared with the standard terms. When introducing the regulation, estimates of risk may be based on cost simulations.

In its comments, **Aller Media** supports Telavox's input and believes that the decision must contain more tangible commitments. This means that it must specify a minimum requirement for alternative price structures, and that much clearer limits must be established regarding when Telenor is obliged to comply with a "reasonable request" for bulk pricing. Adequate enforcement mechanisms must also be established.

Nkom's assessment

Nkom fundamentally believes that the restrictions that are imposed on alternative agreements should not be any greater than is necessary to remedy the identified competition problems. The intention is to facilitate individual negotiations. This means that access seekers must take more responsibility for their access terms than if they buy access according to the standard terms. At the same time, there are undoubtedly very unequal power balances in the market. Nkom therefore believes that there is a need for a certain level of regulatory protection to prevent exploitative market behaviour. The minimum access requirements set out in section 7.1.9 will therefore also apply to alternative agreements. In addition, both MVNOs and service providers will have the opportunity to choose the standard agreement with regulated terms. As regards the requirement for relative prices, this was generally linked to the standard agreement, and Nkom confirms that this will not apply to alternative agreements.

The requirement for non-discrimination between internal and external provision generally includes both prices and other terms. With regard to price levels, Nkom has announced that such agreements will not be subject to price regulation in the form of margin squeeze tests. Nkom also acknowledges that requirements regarding non-discriminatory pricing and accounting separation could limit Telenor's incentive to enter into commercial negotiations concerning alternative pricing structures, in the event of possible uncertainty over the validity of concluded agreements during the contract period. Nkom believes that access seekers who enter into alternative agreements based on a desire for a different pricing structure than that used in the standard agreement must take both the responsibility and the risk regarding price terms and other terms that deviate from the standard agreement during the agreement period. Such terms will not be considered to be in conflict with the requirement for non-discrimination, provided that Telenor can demonstrate that, at the time of the agreement, the access seeker was aware of the deviations from the standard agreement.

As regards the ban on discrimination against external provision compared with internal provision regarding aspects other than price, Nkom believes that this is a key prerequisite if access seekers are to have equal opportunities to compete in the retail market. The purpose of this requirement is to prevent discriminatory behaviour relating to information bias, variable levels of quality among services covered by the agreement, different times for rectification, etc. Equal treatment in these areas is crucial in order to compete and must therefore also apply to access seekers who negotiate individual alternative agreements. However, such a requirement does not prevent access seekers from seeking an agreement that deviates from the standard agreement when negotiating individual agreements, e.g. because the agreement does not cover access to all broadcasting services (ref. Telenor's example), in return for different prices or a different price structure. If the parties conclude an agreement that deviates from the standard agreement in specific areas, the relevant deviations from the standard agreement will not be considered to constitute discrimination.

However, negotiating individual agreements places increased demands on the access seeker's due diligence when entering into a contract. In connection with negotiations, Telenor must use the standard agreement as a starting point, so that it is clear to the access seeker which aspects of the standard agreement have been deviated from to enable different price terms to be agreed.

Nkom is unable to see how a requirement for alternative price structures as formulated in the decision prevents Ice from competing in the wholesale market. The requirement has been designed to prepare all operators for commercial negotiations. The regulatory requirements regarding such agreements are very limited, with only the minimum requirements concerning access in section 7.1.9 and the ban on discrimination between internal and external provision regarding aspects other than those explicitly agreed deviating from the standard agreement.

With regard to the desire among access seekers for Nkom to define alternative price models, Nkom believes that the desire for more tailored price models is best addressed during this regulatory period by facilitating individual negotiations based on the standard terms as a starting point. Nkom will therefore not comply with the wishes expressed concerning the definition of price models other than the standard agreement.

As regards volume discounts, Nkom recognises that this is a key price element for the business models of some access seekers. Thus, Nkom stipulates strict requirements regarding the right to make changes, both in established agreements based on the standard agreement and in the standard agreement, to ensure predictability for the access seekers with regard to such contract terms.

With regard to Telavox's comments concerning the absence of buyer power, Nkom still maintains that the conclusion that access seekers do not have sufficient buyer power to discipline Telenor to an extent which means that the company does not have a strong market position. This is precisely why Nkom has, among other things, introduced an obligation to comply with reasonable requests for alternative price structures. The specific access requirements set out in sections 7.1.8 and 7.1.9 apply to such requests. This means, inter alia, that agreements must be negotiated without undue delay and that, if access is denied, Telenor must provide the requestor with a documented and reasoned refusal.

Furthermore, Nkom interprets Aller Media's comment relating to enforcement mechanisms as an extension of the comment linked to the fact that there must be clear limits as regards when Telenor must comply with a reasonable request for an alternative price structure, including bulk pricing. Pursuant to Section 4(1) of the Electronic Communications Act, Nkom has the power to require Telenor to comply with any reasonable request to enter into or amend an agreement concerning access. Telenor's obligation to meet reasonable requests for alternative price structures is set out in section 7.5.8 of the Market 15 decision; cf. paragraph 500 of the decision.

Furthermore, remedies for enforcing breaches of obligations are set out in section 7.8 of the Market 15 decision. It is apparent from this section that Nkom will use remedies such as requirements concerning rectification or coercive fines in cases where such measures are deemed to be necessary, appropriate and proportionate. Nkom believes that the remedies for enforcing breaches of obligations in the Market 15 decision are adequately explored and described in section 7.8 of the decision.

In summary, Nkom has, on the basis of the consultative comments, explicitly stated in the decision that requirements for relative prices do not apply to agreements with alternative price structures. The requirement for non-discrimination between internal and external provision is specified in relation to contract terms that deviate from the standard agreement. Such agreements are covered by the minimum access requirements in sections 7.1.8 and 7.1.9.

7.5.4 Price regulation for co-location

Assessment and conclusion in the decision notification

Nkom announced requirements for cost-oriented prices for co-location with annual reporting of cost accounts based on historical fully distributed costs at aggregated level.

Consultation remarks

Telenor does not believe that Nkom has analysed the co-location market or satisfactorily assessed whether measures are necessary and proportionate. Telenor strongly disagrees with Nkom's rationale for continuing access for Telia, which Telenor refers to as subsidising of Telia's mobile coverage and 5G development. If, as a result of network competition in the wholesale market, Nkom orders Telenor to subsidise the further development of competing networks on a par with Telias, it will in practice impose perpetual regulation on the provider that has a stronger position as regards coverage or better quality in the network than its competitors (i.e. imposed redistribution until all mobile networks are equally good or bad).

Telenor believes that Nkom is proposing very intrusive price regulation which risks damaging establishment and competition in the co-location market. This type of intervention requires considerable justification and analysis. Telenor stresses that:

- There is a marked artificial asymmetry in the prices for co-location between Telenor and other tower operators.
- Regulated prices set below economic cost would give the wrong price signals to mobile network developers, with a risk of suboptimal and less cost-effective development.
- The regulation will lead to slower infrastructure development due to artificially low price levels, both because Telenor is building slower/smaller and because other potential bidders are at risk of competition from Telenor's regulated prices.
- The regulation leads to less cost-effective infrastructure development: When Telenor Infra builds a site, the company is not incentivised to build with a view to having more lessees when a new site is created. On the contrary, the financial incentives would suggest that the regulated tower operator should only build sufficient capacity for the customer requesting the new site, and instead carry out investment contribution-funded capacity expansions whenever a new regulatorily protected lessee requests placement.

Further cost-based price regulation would therefore be an unlawful remedy. If Nkom nevertheless wishes to continue with such a measure, Telenor proposes that cost accounting be based on "current cost" or alternatively reciprocal prices.

- **Cost accounting based on current cost:**
  According to Telenor, prices based on cost accounting in accordance with historical cost/financial statements mean that invested capital is underestimated, and that Telenor has to offer co-location at below economic cost. This is because the financial statements disregard both the increase in the value of the assets over time due to general cost increases and the effect of the actual economic life of the fixed assets often being considerably longer than the useful life of an asset for accounting purposes. Telenor will therefore not be compensated for the opportunity cost, i.e. the revenue that Telenor could receive from alternative uses of the fixed assets, which in this case could be to sell the fixed assets to a buyer without corresponding regulatory restrictions. In other words, regulated prices are lower than a rational operator would charge in a hypothetical market with perfect competition, which is the price level that gives the most correct signals for investment decisions among access seekers.

  Current cost would mean that the cost accounts would be based on the financial statements, with the exception of the financial items that will be replaced by an imputed interest rate on capital employed calculated according to current cost principles. The “current cost” calculation would be based on the fixed assets in the financial statements, and indexed by class, with each class of fixed asset using an appropriate index from Statistics Norway, combined with the estimated actual economic life of the fixed assets.

- **Reciprocal prices:**
  Telenor refers to calculations submitted to Nkom in connection with the consultation in May 2023, which showed that the price levels of the tower companies established by Telia and Ice are well above Telenor's regulated and commercial terms. Reciprocal prices as an alternative to prices derived from cost accounting would create more proportionality. Specifically, Telenor is proposing that Telenor Norge annually compares Telenor Infra's commercial prices for a number of standard configurations of mobile sites with the price offers that Telenor Norge receives for the same configurations from Telia Towers (Telia) and Tårnselskapet (Ice). If it is found that Telenor Infra's commercial prices (including average investment contributions and establishment costs) are lower than what other operators are offering, Telenor Infra should be given the right to charge commercial prices from the operators that charge higher prices than Telenor Infra's commercial prices. Revenues and costs for mobile operators to which Telenor Infra can offer commercial prices would be excluded from the relevant year's mobile cost accounts.

  This would make the regulation more proportionate and pull to a greater extent in the direction of Nkom's stated goal of cost-effective development of mobile networks, in that

Telenor's proposal would also incentivise the other tower operators to moderate their co-location prices.

Telia supports the continuation of price regulation for co-location and agrees that efficient access to co-location is important for the rapid and cost-effective development of the three mobile networks. Telia refers to the requirement that invoices for construction contributions in connection with capacity expansions must be specified in as much detail as possible. Telia has found that this requirement is not always followed in practice, making it difficult to determine whether affordable and cheapest alternatives are chosen.

In its consultation response, **Ice** notes that, for an operator like Ice, with a considerably smaller proportion of its own mobile masts with provision for co-location, any price increase will have major consequences for both operating and establishment costs, which in turn will distort competition. The price increase for co-location will primarily affect the third operator. Completion of the development project will require a large number of placements with Telenor, which is an even more dominant mast owner in the part of the country where Ice is planning further development in the future.

Ice believes that the regulation needs to distinguish between investment contributions and general maintenance. At present, Telenor Infra handles all matters such as investment contributions that Ice has to pay for, arguing that the regulation does not currently allow the installation owner and lessees to share the cost of such an upgrade. Ice is unable to see how such a solution would be appropriate, as these are measures which under ordinary tenancies would be the responsibility of the building owner (e.g. asbestos removal, reinforcement of floors), and which in any case benefit both the installation owner and the lessees. Ice asks Nkom to explain whether it is Nkom's understanding that the regulation does not allow Telenor Infra to share these costs and, if necessary, clarify the distinction between investment contributions and general maintenance and upgrades.

Ice comments on Telenor's remark that regulated prices do not compensate for the opportunity cost and believes that this is an artificial way of looking at Telenor's investments in its own network as long as the network is a fundamental part of Telenor's own business. It is in any case difficult to envisage that the tenancy itself will diminish the value in the event of the sale of fixed assets, quite the opposite. Furthermore, if there is to be consistency in the capital employed in the cost accounts including increases in the values of the fixed assets, and the lessee already compensating Telenor for a proportion of the depreciation and a reasonable return, the lessee should also be entitled to a deduction for its share of the increase in value. It must also be expected that the investment decision was at the time it was made in line with Telenor's required rate of return. Revenues from subsequent co-location are thus a potential super-profit that is in addition to this.

In cases where a co-location request from Ice triggers a need for investment in an installation, this in reality represents an increase in value for Telenor which is paid for in full by Ice. This is not something that Ice gets a deduction for. At the same time, Ice wishes to point out that the prices that Telenor offers for investment contributions, establishment fees and electricity exceed the real costs. In response to Telenor's proposal for reciprocal prices, Ice notes that investment contributions must be excluded in their entirety in this case.

Telenor comments concerning Ice's input concerning upgrades at locations and claims that a customer who triggers the need for an upgrade covers the cost of this, as stated in the regulation. If the upgrade covers circumstances that are already part of Telenor Infra's general maintenance plan, the customer will not be charged for this part of the upgrade. Asbestos removal and floor reinforcement are measures that would not be necessary without a new placement or an upgrade to an existing placement at the site. The cost incurred is thus triggered by the customer, who must therefore cover the cost.

Nkom's assessment

Co-location is a form of access that is pivotal to achieving the goal of effective competition in the market for access and origination in mobile networks. Nkom does not concur with Telenor's view that access to cost-oriented prices entails subsidising other operators. Through the way in which it is formulated, the requirement guarantees Telenor coverage of costs for operation and investment in fixed assets that are used for co-location, while at the same time the purpose of the remedy is precisely to lower the barriers to the establishment of new infrastructure through cost-sharing. Furthermore, the co-location obligation does not constitute perpetual regulation.

Telenor argues that the regulation is highly intrusive and risks harming establishment and competition in the market for co-location. Nkom acknowledges that requirements regarding cost-oriented prices are intrusive. At the same time, Nkom believes that the benefits for competition in Market 15 outweigh any negative effects of the requirement:

- It is the need to ensure competition in Market 15 that is the starting point for the obligation, rather than the need to offer co-location. The operators' description of the co-location offering also does not support the view that this market is characterised by competition. Input from Telia and Ice indicates that in many cases there are no alternatives to co-location at a given location and thus no competition to offer co-location to other operators. The operators pay each other according to list prices, without any negotiation over price, which also does not indicate competition to offer co-location.
- The obligation for cost orientated prices is monitored by aggregated cost accounts for all base stations, where Telenor are able to cover a share of operation and maintenance, as well as depreciation on investments and a reasonable return on capital. In addition, Telenor can charge construction contributions for capacity expansions. This means that Telenor immediately can recover the cost for investments made for co-location customers. In connection with upgrading to 5G, construction contributions have been used to a large extent. Telenor's claims about disproportionate regulation do not take this into account.

- It is not a goal for the competition in Market 15 to duplicate passive infrastructure. The need to give appropriate investment signals to other operators with regard to the establishment of passive infrastructure is thus of secondary importance. In many cases, the parallel establishment of infrastructure is not desirable.
- Furthermore, the co-location obligation does not constitute perpetual regulation and, through its commercial prices, Telenor has given clear indications that prices will increase as soon as the regulation is discontinued. For operators considering building their own passive infrastructure, competition from Telenor's regulated prices will therefore be temporary in nature.
- As regards incentives to build passive infrastructure with a view to taking on more lessees, the incentive to build exclusively for one's own needs and instead carry out contribution-financed investments for external parties will to some extent be present for regulated operators, irrespective of the method used for price regulations. At the same time, high construction contributions act as an effective stop to co-location, as potential buyers in such cases will have to consider other alternatives despite the fact that this will be time and resource-intensive. In this context, Telenor's arguments about its own incentives to carry out up to several facility-funded capacity expansions appear to contrast with the argument that there is competition to offer co-location.

Current Cost

As regards the method for valuing fixed assets, "Current Cost Accounting" (CCA) represents an alternative to historical cost. Both methods will provide cost coverage for the regulated operator, as stated in the report entitled "Modelling the costs of copper networks in the Norwegian context".[11] The net present value will be the same according to both methods. However, the accrual of cost coverage differs between the two methods, in that the coverage of expenses is prolonged in the case of CCA. However, a change in method during the lifetime of a fixed asset would entail a considerable risk of over recovery. A change of method must therefore be made according to specific methods if this is to be prevented.

In a meeting with Nkom, Telenor gave a more detailed account of the background to the proposal and how a possible transition to a new method could take place. Telenor noted that a high proportion of the fixed assets were acquired before [redacted] and that, as a result of these largely being depreciated, the value is underestimated in the cost accounts and the pricing of co-location. As a starting point, Telenor assumes that all fixed assets that are still in use will be revalued. Telenor does not consider over recovery to be a relevant problem for co-location, as the competition

[11] The report is available on Nkom's website: "Marked 3a og 3b lokal og sentral tilgang til faste aksessnett" (Market 3a and 3b local and central access to fixed access networks") - Nkom under "Vedtak i marked 3a" (Decision concerning Market 3a), dated 20 December 2018

problem in the market is linked to denial of access. Furthermore, Telenor are of the view that various indicators can be used depending on the level of detail to be used in the valuation of the fixed assets. An alternative may be to apply KPIs to all fixed assets. In principle, Telenor assumes that straight-line depreciation can be used under "Current cost", but with a longer depreciation period than follows from the financial statement's rules.

Telenor is correct in saying that denial of access is the core problem in Market 15. However, denial of access must not be interpreted solely as refusing to enter into an access agreement, as it also includes situations where access is offered at unreasonably high prices, thus preventing access from becoming real. This is also stated in chapter 5 of the decision on competition problems. The purpose of price regulation concerning co-location is to make the obligation effective, so that the offering becomes real for other network owners.

Nkom considers that revaluating Telenor's fixed assets in the way that Telenor proposes would entail a high risk of over recovery, and the consequences for access prices of any revaluation according to Telenor's principles would be extremely uncertain. The consequences may be that the incentives for co-location at Telenor's installations will be weakened and network development made less efficient. Ice has clearly stated that its development plans for the next few years are dependent on efficient co-location.

Implementing the transition to CCA based on principles that prevent over recovery and provide access seekers with the necessary assurance regarding valuation will be a major task which will require a transparent and verifiable process based around agreed principles. Telenor's proposal does not meet such requirements. In light of the fact that regulation in Market 15 has a relatively short-term perspective, Nkom considers that such a major task would not be proportionate within the regulatory period either.

The alternative method proposed by Telenor does not appear to be well-suited to fulfilling the purpose of the regulation of co-location.

Reciprocal prices

Telenor argues that a requirement for reciprocal prices would make the requirement for cost orientation more proportionate by requiring other tower companies to moderate their own co-location prices.

Nkom is concerned about a trend with rising commercial prices for co-location, especially given that the aim is to phase out regulation in Market 15 within a few years. The consultation responses indicate that higher prices for co-location are to be expected when the regulation is discontinued. This would be particularly unfortunate for Ice and Telia, which have a higher proportion of placements with Telenor than vice versa.

The goal of cost-effective roll-out of mobile networks and mutual use of co-location to reduce costs leads makes it relevant to consider principles of reciprocity as a means of making the obligation imposed on Telenor more proportional. The proposal that Telenor has described gives both Ice and Telia the opportunity to co-locate at cost-oriented prices throughout the regulatory period, provided that their prices for co-location offers to Telenor do not exceed Telenor's commercial prices.

Nkom is considering the introduction of the principle of reciprocal prices in the regulatory period in the decision.

Construction contributions

In their consultation responses, Telia and Ice comment on how Telenor uses and invoices construction contributions. Ice argues that Telenor uses construction contributions to cover maintenance costs and asks Nkom to explain whether the regulation does or does not allow such costs to be shared. The general rule is that general maintenance costs should be included in the cost accounts; see section 7.5.10.2 of the decision, which states that the rental price must cover a share of the operating costs, among other things.

However, if measures must be implemented to provide capacity for one or a limited number of lessees at a location, the cost of the measure must be charged to those who need the capacity. In principle, however, Telenor must select the simplest and most reasonable measure to increase capacity, if there are a number of possible options. Section 7.5.10.3 of the decision stipulates that the requestor must cover the total cost of the measure, even if there is some capacity available at the location in question. If Telenor adopts a solution for capacity expansion that also benefits Telenor itself, the construction contribution must be reduced correspondingly.

Nkom acknowledges that there may be somewhat blurred boundaries between when a measure should be regarded as a measure aimed at expanding capacity for a single lessee and when, in practice, the measure actually also benefits Telenor and any other lessees, and entails maintenance of the location itself. Such cases must therefore be assessed specifically and on a case-by-case basis. In this context, it is important that the offer made to the requestor specifies the measures that must be taken and that the invoice is itemised in sufficient detail to enable the requestor to assess the measure and, where applicable, submit a complaint to Nkom. The requirements regarding itemised offers and invoices are set out in the special obligations in section 7.5.12.

Nkom has adjusted the price regulation in the decision by opening up to implement a requirement for reciprocal prices during the regulation period. Furthermore, Nkom does not consider that the consultation comments result in a need to make changes to the regulation of co-location.