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EFTA SURVEILLANCE AUTHORITY DECISION

of 29 June 2020

**Relating to proceedings pursuant to Article 54 of the EEA Agreement**

**Case No 71480 Telenor**

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THE EFTA SURVEILLANCE AUTHORITY (“the Authority”),

HAVING REGARD to the Agreement on the European Economic Area (“EEA Agreement” or “EEA”),

HAVING REGARD to Chapter II of Protocol 4 to the Agreement between the EFTA States on the establishment of a Surveillance Authority and a Court of Justice (“Surveillance and Court Agreement”), on the implementation of the rules on competition laid down in Articles 53 and 54 of the EEA Agreement, and in particular Article 7 and Article 23(2) thereof,

HAVING REGARD to the Authority’s Decision of 26 March 2014 to initiate proceedings in this case,

HAVING given the undertakings concerned the opportunity to make known their views on the objections raised by the Authority pursuant to Article 27(1) of Chapter II and Articles 11 and 12 of Chapter III of Protocol 4 to the Surveillance and Court Agreement,

AFTER consulting the Advisory Committee on Restrictive Practices and Dominant Positions,

HAVING REGARD to the final report of the Hearing Officer in this case,

WHEREAS:

## I. FACTUAL BACKGROUND

### 1 INTRODUCTION

1. This Decision relates to anti-competitive conduct, contrary to Article 54 EEA, by Telenor Norge AS, including, where relevant, its legal predecessor Telenor Mobil AS and its parent company Telenor ASA (together, “Telenor”<sup>1</sup>) with respect to stand-alone mobile broadband (“MBB”) services<sup>2</sup> provided to residential customers in Norway, from 1 January 2008 until 31 December 2012, inclusive (“the Period under Consideration”).
2. Telenor is the incumbent fixed and mobile communications provider in Norway and the owner of a nationwide mobile communications network.
3. As a vertically-integrated operator, Telenor provided mobile communications services at two levels of the value chain during the Period under Consideration (see Section 4):
  - (i) at the upstream or wholesale level: access and origination services<sup>3</sup> to its own vertically-integrated downstream retail division (internal sales or self-supply), as well as to competing providers of retail mobile communications services (external sales); and
  - (ii) at the downstream or retail level: access and mobile communications services to end users.
4. Access to a public<sup>4</sup> mobile telephone network is a precondition for operators wishing to offer mobile communications services to end users. While mobile network operators (“MNOs”, see Section 4.2.1), such as Telenor, use their own network facilities (and are thus able to self-supply), non-MNOs (see Section 4.2.2), such as Telenor’s wholesale customers, depend on being able to buy network access at the wholesale level.
5. In the present case, the Authority has identified the following relevant upstream market: the wholesale market for access and origination services on public mobile telephone networks in Norway (see Sections 8.2 and 8.3).
6. Wholesale access and origination services allow operators to provide *inter alia* MBB services at the retail level. The Authority has identified the following relevant

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<sup>1</sup> See Sections 2 and 14 below for further details. For the remainder of this Decision, the references to “Telenor” include Telenor Norge AS and, where relevant, also its legal predecessor Telenor Mobil AS and its parent company Telenor ASA.

<sup>2</sup> See paragraph 7 and Section 8.4 below for a further description of *MBB services* referred to in this Decision.

<sup>3</sup> The key wholesale elements required to provide retail mobile communications services are: (i) network access and (ii) origination services. Mobile network access and mobile call origination have traditionally been supplied together so that both services have generally been considered part of the same relevant market at wholesale level. For the purposes of this Decision, where reference is made to wholesale ‘access’ or to a wholesale or upstream ‘input’, this includes both network access and origination services unless expressly stated otherwise.

<sup>4</sup> As set out in Article 2 of the Framework Directive (see footnote 108 for the full reference), a *public* communications (telephone) network means an electronic communications network used wholly or mainly for the provision of publicly available electronic communications services.

downstream market in this case: the retail market for the provision of stand-alone MBB services to residential customers in Norway (see Sections 8.4 and 8.5).

7. For the purposes of this Decision:

- *MBB* refers to the service which allows end users to gain access to the internet via a large-screen device (for example, a laptop, netbook or tablet) without being confined to a fixed location (i.e. ‘on the go’ or ‘on the move’) through external dedicated modules (for example, PC-cards, USB<sup>5</sup> modems or dongles with SIM technology<sup>6</sup>) or via internal (built-in) modules (for example, PCs, laptops or tablets with embedded connectivity);
- *Stand-alone MBB services* denotes MBB subscriptions (tariff plans) which were available for purchase separately from other mobile communications services, i.e. not included in a package or bundle;<sup>7</sup>
- *Mobile telephony data services* (“MTDS”), which are distinct from MBB, refer to services which allow end users to gain access to the internet, without being confined to a fixed location, via the same mobile telephony subscription/device as voice and SMS<sup>8</sup>/MMS<sup>9</sup> services;
- *Mobile data services* or *mobile internet access* covers stand-alone MBB and MTDS;
- *Ordinary mobile communications services* refer to voice services, SMS/MMS and MTDS delivered collectively via the same mobile telephony subscription/device;
- *Mobile communications services*<sup>10</sup> refer to both ordinary mobile communications services and stand-alone MBB services.

8. The Authority has reached the conclusion that Telenor held a dominant position in the wholesale market for access and origination services on public mobile telephone networks in Norway during the Period under Consideration (see Section 9).

9. The Authority has also found that, during the Period under Consideration, the spread between the prices charged upstream by Telenor to competitors for the supply of wholesale access and origination services on its public mobile telephone network, and the prices charged by Telenor to its own customers at the downstream level for residential stand-alone MBB services in Norway, did not allow equally efficient or as-efficient competitors, relying on such wholesale services, to compete with Telenor in the

<sup>5</sup> *USB* stands for *Universal Serial Bus*.

<sup>6</sup> *SIM* stands for *Subscriber Identity/Identification Module*. It is an integrated circuit specially created for storing the international mobile subscriber identity (*IMSI*), and is used to identify and authenticate the holder of a mobile device.

<sup>7</sup> The package format (several mobile communications services, including MBB services, sold together) was typically offered to business customers during the Period under Consideration.

<sup>8</sup> *SMS* stands for *Short Message Service*, which is the formal name for text messaging.

<sup>9</sup> *MMS* stands for *Multimedia Messaging Service*, i.e. the service which allows mobile phone and smartphone users to send each other multimedia messages.

<sup>10</sup> This term covers the same services as the term *mobile telecommunications services* used by the Authority in other case documents referred to in Section 3 below.

downstream market without incurring a loss (see Section 10). Such pricing practices are referred to as a ‘margin squeeze’.

10. In particular, the margin squeeze practices consisted of:
  - (a) From 1 August 2008 to 31 August 2010,<sup>11</sup> charging wholesale NRO<sup>12</sup> tariffs to Network Norway AS (“NwN”), on the basis of which an as-efficient competitor of Telenor would have earned negative gross margins;
  - (b) From 1 January 2008 to 30 November 2010, charging wholesale MVNO<sup>13</sup> tariffs to Ventelo,<sup>14</sup> on the basis of which an as-efficient competitor of Telenor would have earned negative gross margins;
  - (c) From 1 January 2008 to 31 December 2012, charging wholesale SP<sup>15</sup> tariffs, on the basis of which an as-efficient competitor of Telenor would have earned negative gross margins.
11. The margin squeeze practices were capable of having anti-competitive effects (see Section 10.5).
12. The Authority does not consider that Telenor’s conduct can be objectively justified (see Section 10.6).
13. Telenor’s behaviour summarised in paragraphs 9 to 10 above and further set out in the present Decision amounts to three separate infringements of Article 54 of the EEA Agreement (“Article 54 EEA”).

## 2 PARTIES TO THE PROCEEDINGS

14. As set out in Section 14, this Decision is addressed to Telenor Norge AS, including its legal predecessor Telenor Mobil AS, and its parent company Telenor ASA.<sup>16</sup>
15. From 2006 until the end of 2009, the Norwegian business related to mobile communications (both wholesale and retail activities) was conducted through Telenor Mobil AS, which was owned 100% by Telenor Mobile Holding AS, a company owned 100% by Telenor ASA.<sup>17</sup>

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<sup>11</sup> Where in this Decision a period is expressed as from and until certain dates, the beginning and ending dates are included in that period.

<sup>12</sup> See paragraph 80 below for a description of the term *National Roaming Operator* or *NRO*.

<sup>13</sup> See paragraph 83 below for a description of the term *Mobile Virtual Network Operator* or *MVNO*.

<sup>14</sup> In this Decision, the term “Ventelo” covers the following entities where relevant: Ventelo AS, Ventelo Norge AS and Ventelo Bedrift AS.

<sup>15</sup> See paragraph 87 below for a description of the term *Service Provider* or *SP*.

<sup>16</sup> See footnote 1 above.

<sup>17</sup> See Document No 726991, e-mail from Telenor of 27 October 2014 with an overview of the company structure of Telenor.

16. From 2010 and throughout the rest of the Period under Consideration,<sup>18</sup> this business has been conducted through Telenor Norge AS, which was owned 56% by Telenor Mobile Holding AS and 44% by Telenor Networks Holding AS (both owned 100% by Telenor ASA).<sup>19</sup> Telenor Norge AS is the incumbent fixed and mobile communications operator in Norway. It is part of the Telenor Group, which provides electronic communications services in the Nordics (specifically Norway, Sweden, Denmark and Finland) and Asia.<sup>20</sup>
17. No other Telenor companies have been responsible for offering access to the mobile networks in Norway during the Period under Consideration.<sup>21</sup>
18. Telenor's retail brands in Norway during the period 2006–2014 comprised: *Telenor* (consumer and business customers), *djuice*<sup>22</sup> (consumer), *Talkmore*<sup>23</sup> (consumer) as from 2007 and *Dipper*<sup>24</sup> (business) as from 2013.<sup>25</sup>
19. Telenor's corporate structure during the Period under Consideration can thus be summarised as follows:

<sup>18</sup> See Telenor Group Annual Report 2009, page 105, footnote 1 (available at: <[https://www.telenor.com/wp-content/uploads/2012/03/rapport\\_2009.pdf](https://www.telenor.com/wp-content/uploads/2012/03/rapport_2009.pdf)>, accessed June 2020): “At the end of 2009, the companies Telenor Telecom Solutions AS, Telenor Mobil AS, Telenor Bedrift AS and Telenor Privat AS have merged with Telenor Telecom Solutions AS as the acquiring company. The merged company has changed its name to Telenor Norge AS. Telenor Mobile Holding AS has received shares in Telenor Norge AS as merger consideration for shares in Telenor Mobil AS.” The Authority’s translation of: “Ved utgangen av 2009 har selskapene Telenor Telecom Solution AS, Telenor Mobil AS, Telenor Bedrift AS og Telenor Privat AS fusjonert med Telenor Telecom Solutions AS som det overtakende selskap. Det fusjonerte selskapet har endret navn til Telenor Norge AS. Telenor Mobile Holding AS har mottatt aksjer i Telenor Norge AS som fusjonsvederlag for aksjene i Telenor Mobil AS.” See also the announcement in the Brønnøysund Register Centre of 17 December 2009, available at: <[https://w2.brreg.no/kunngjoring/hent\\_en.jsp?kid=20090000519035&sokeverdi=976967631&spraaq=nb](https://w2.brreg.no/kunngjoring/hent_en.jsp?kid=20090000519035&sokeverdi=976967631&spraaq=nb)>, accessed June 2020; and the Norwegian NCA’s Decision V2018-20 (see footnote 220 below for the full reference), paragraphs 11-13.

<sup>19</sup> See Document No 726991, e-mail from Telenor of 27 October 2014 with an overview of the company structure of Telenor. The Authority understands, on the basis of publicly available sources, that Telenor Norge AS is currently wholly owned by Telenor Networks Holding AS, which is still owned 100 % by Telenor ASA; see: <<https://www.proff.no/roller/telenor-norge-as/fornebu/telekommunikasjon/IG5NT1R01PE/>>, accessed June 2020.

<sup>20</sup> For a description of the Telenor Group, see: <<https://www.telenor.com/about-us/>>, accessed June 2020.

<sup>21</sup> See Document No 726991, e-mail from Telenor of 27 October 2014 with an overview of the company structure of Telenor.

<sup>22</sup> Telenor Norge AS also sells services under the *djuice* brand (*djuice* is in other words not incorporated as a subsidiary).

<sup>23</sup> Talkmore AS was 100% owned by Telenor Mobil AS (2007 – 2009) and by Telenor Norge AS as from 2010 (See Document No 726991).

<sup>24</sup> Dipper AS is 100% owned by Telenor Norge AS (see Document No 726991).

<sup>25</sup> See Document No 726991, e-mail from Telenor of 27 October 2014 with an overview of the company structure of Telenor.

**Table 1: Corporate structure - Telenor's mobile communications services 2006–2014**

		Telenor ASA									
		Telenor Mobile Holding AS (100% owned by Telenor ASA)					Telenor Mobile Holding (100% Tn ASA ) Telenor Networks Holding (100% Tn ASA)				
Telenor retail companies	Telenor Mobil AS (100% Mobile Holding)					Telenor Norge AS (56% Mobile Holding, 44% Networks Holding)					
		Talkmore AS (100% Tn Mobil AS, from 2010 100% Tn Norge AS)									
										Dipper AS (100% Tn Norge)	
		2006	2007	2008	2009	2010	2011	2012	2013	2014	
Brands	Telenor (consumer and business)										
		djuice (consumer)									
		Talkmore (consumer)									
										Dipper (business)	

Source: Telenor<sup>26</sup>

20. In 2012 (the last year of the Period under Consideration), Telenor ASA's worldwide turnover was EUR 12.56 billion (NOK 93.9 billion).<sup>27</sup> Telenor Norge AS's turnover was EUR 3.02 billion (NOK 22.6 billion).<sup>28</sup>

### 3 PROCEDURE

21. In 2012, the Authority had information indicating that Telenor may have engaged in practices that constituted abuses of a dominant position within the meaning of Article 54 EEA, and/or may have concluded agreements, or may have been party to concerted practices, which were contrary to Article 53 EEA.
22. Acting on this information, the Authority carried out inspections at Telenor's premises in Fornebu, Norway, from 3 to 12 December 2012.<sup>29</sup> The inspections continued at the Authority's premises in Brussels from 12 to 14 March 2013, in the presence of Telenor representatives.

<sup>26</sup> See Document No 726991, attachment to the e-mail from Telenor of 27 October 2014 with an overview of the company structure of Telenor.

<sup>27</sup> See Telenor Group Annual Report 2012 on page 38 (available at: <[https://www.telenor.com/wp-content/uploads/2013/04/tg\\_annual-report-2012.pdf](https://www.telenor.com/wp-content/uploads/2013/04/tg_annual-report-2012.pdf)>, accessed June 2020). The turnover includes all segments except "Broadcast", "Other units" and "Eliminations". Exchange rate EUR/NOK: 7.4751.

<sup>28</sup> Information from the Brønnøysund Register.

<sup>29</sup> The Inspection Decision was addressed to Telenor Norge AS and to Telenor ASA, the parent company of the Telenor Group; see Decision No 443/12/COL of 29 November 2012 (Document No 654349 for the Norwegian version and Document No 648574 for the English version).

23. Subsequently, the Authority and Telenor exchanged correspondence and held various meetings, including State of Play meetings.<sup>30</sup>
24. The Authority issued several requests for information to Telenor and to a number of other operators active in the mobile communications sector in Norway.<sup>31</sup>
25. On 26 March 2014, the Authority decided to initiate proceedings pursuant to Article 2(1) of Chapter III of Protocol 4 to the Surveillance and Court Agreement, concerning possible infringements by Telenor of Articles 53 and/or 54 EEA.<sup>32</sup>
26. In a meeting with the Authority on 7 August 2015, Telenor offered the possibility of commitments which could result in the Authority adopting a commitments decision under Article 9, instead of a prohibition decision under Article 7 of Chapter II of Protocol 4 to the Surveillance and Court Agreement. In a letter to the Authority dated 15 September 2015, Telenor explained its proposal in writing.<sup>33</sup> In a meeting between Telenor and the Authority on 22 September 2015,<sup>34</sup> further details were provided. [CONFIDENTIAL: Description of the content of the commitments] The Authority did not consider it appropriate to accept commitments in respect of the margin squeeze practices, and the discussions regarding a potential commitments decision did not proceed further. The Authority decided in its discretion to pursue the proceedings under Article 7.
27. On 1 February 2016, the Authority adopted a Statement of Objections (“SO”<sup>35</sup>) addressed to Telenor, in which it came to the preliminary conclusion that, contrary to Article 54 EEA, Telenor had abused its position of dominance by:
  - (i) Squeezing the margins of its competitors between the wholesale market for access and origination services on public mobile telephone networks and the retail market for the provision of stand-alone MBB services to residential customers in Norway from and including January 2008 until the end of 2012; and

<sup>30</sup> A State of Play meeting took place on 21 August 2014 and various other meetings were held on 30 May 2013, 11 December 2014, 30 April 2015 and 22 September 2015.

<sup>31</sup> See requests for information sent to Telenor on 16 October 2013 (Document No 687281) and on 28 March 2014 (Document No 703952); see also requests for information sent on 28 March 2014 to the following third parties: Hello (Document No 703955); Phonero (Document No 703957); TDC (Document No 703956); Tele 2/Network Norway (Document No 703959); Telia (Document No 703953) and Ventelo (Document No 703954).

<sup>32</sup> EFTA Surveillance Authority Decision of 26 March 2014 to initiate proceedings pursuant to Article 2(1) of Chapter III of Protocol 4 to the Surveillance and Court Agreement (Case No 71480 – Telenor), see Document No 697590, available at:

<https://www.eftasurv.int/cms/sites/default/files/documents/Decision%20to%20initiate%20proceedings%20No%20135%2014%20COL%20Telenor.pdf>, accessed June 2020.

<sup>33</sup> See Document No 773188.

<sup>34</sup> See Document No 776201.

<sup>35</sup> Document No 784362: Decision No 028/16/COL.

- (ii) Applying lock-in clauses in conjunction with early termination penalties in the retail market for the provision of mobile communications services to business customers in Norway from at least 2008 until the date of adoption of the SO.<sup>36</sup>
28. On 25 April 2016, Telenor submitted its reply to the SO (“Reply to the SO”<sup>37</sup>), in which it raised a number of objections to the Authority’s preliminary findings and conclusions and provided additional information.
29. Telenor exercised its right to request an Oral Hearing with the Authority, which was held on 3 and 4 October 2016 in Brussels.
30. In light of certain arguments raised by Telenor in its Reply to the SO, the Authority sent additional requests for information to TeliaSonera Norge AS (“Telia”<sup>38</sup>)<sup>39</sup> and TDC Norge AS (“TDC”).<sup>40</sup>
31. The Authority identified additional evidence, documents and factual elements and developed a number of additional arguments in support of the preliminary conclusions it reached in the SO, upon which it intended to rely in a potential decision as provided for in Articles 7 and 23(2) of Chapter II of Protocol 4 to the Surveillance and Court Agreement. This was carried out in light of Telenor’s Reply to the SO, the additional

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<sup>36</sup> See paragraph 486 of the SO.

<sup>37</sup> When reference is made to the Reply to the SO in this Decision, the Authority refers to Part I of Telenor ASA and Telenor Norge AS’ reply of 25 April 2016 to the EFTA Surveillance Authority’s Statement of Objections of 1 February 2016, which concerns the margin squeeze part of the investigation (see Document No 802055).

<sup>38</sup> See footnote 69 below.

<sup>39</sup> Request for information sent to Telia on 13 February 2017 (see Documents No 840673 and 1076450).

<sup>40</sup> Request for information sent to TDC on 18 May 2017 (see Document No 857212).

information submitted by Telenor therein and by third parties,<sup>41</sup> and the responses to the additional requests for information to Telia<sup>42</sup> and TDC.<sup>43</sup>

32. A State of Play meeting was held on 12 October 2017 to inform Telenor of this development. During this meeting, the Authority announced its intention to send Telenor a letter of facts and/or a supplementary statement of objections concerning such additional evidence and arguments upon which the Authority intended to rely in support of its objections. This intention was again communicated to Telenor during telephone conversations with its counsel on 18 May 2018, 11 January 2019 and 11 June 2019 and in an e-mail to its counsel on 11 April 2019.
33. The additional evidence, documents, factual elements and arguments identified by the Authority in support of the preliminary conclusions reached in the SO were set out in a Supplementary Statement of Objections (“SSO”<sup>44</sup>) addressed to Telenor, adopted on 24 June 2019.
34. The additional evidence and arguments in the SSO only concerned the alleged margin squeeze practices set out in the SO. In the SSO, the Authority informed Telenor that it had decided, for reasons of prioritisation, to discontinue its investigation into the second alleged abuse set out in the SO, i.e. the lock-in clauses in conjunction with early termination penalties.
35. In the SSO the Authority also relied on a limited amount of information that was confidential vis-à-vis Telenor. Access to such information was granted to Telenor’s external advisors via a data room procedure on 31 July 2019.

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<sup>41</sup> Document No 1075917: Telia’s letter to the Authority of 30 August 2016, with Telia’s comments on the SO, and Document No 830312: Telia presentation for the Oral Hearing of 3 October 2016.

<sup>42</sup> Telia’s reply of 14 March 2017 to the Authority’s request for information of 13 February 2017. For the non-confidential version of Telia’s reply, see: Cover letter (Document No 847236), Appendix 1: Telia’s reply to the Authority’s questionnaire (Document No 847237), non-confidential version of Appendix 2: Excel spreadsheet on Retail & Wholesale (Document No 1076156), non-confidential version of Appendix 2: Excel spreadsheet on Retail & Wholesale – corrected version of 12 June 2019, in which an error in the data for January 2012 has been corrected by Telia (Document No 1076158), Appendix 3 (Document No 847239), Appendix 4 (Document No 847240), Appendix 5 (Document No 847241), Appendix 6 (Document No 847242) and Appendix 7: wholesale contracts, excluding the still active wholesale contracts, i.e. those with Wireless Maingate, Lycamobile NUF and Telio AS/NextGenTel (Documents No 847808, 847809, 847810, 847811, 847812, 847813, 847814, 847815, 847817, 847818, 847819, 847820, 847821, 847822, 847823, 847824 and 847825). For the confidential information included in Telia’s reply of 14 March 2017, see: confidential version of Appendix 2: Excel spreadsheet on Retail & Wholesale (Document No 847238), confidential version of Appendix 2: Excel spreadsheet on Retail & Wholesale – corrected version of 12 June 2019, in which an error in the data for January 2012 has been corrected by Telia (Document No 1076141 and the cover e-mail: Document No 1076142) and the confidential still active wholesale contracts with Wireless Maingate, Lycamobile NUF and Telio AS/NextGenTel (Documents No 847806, 847816, 847807 and 847826).

<sup>43</sup> TDC’s reply of 15 June 2017 to the Authority’s request for information (see Documents No 880377, 1076043, 1076044, 1076045, 1076046, 1076047, 1076049, 1076050, 1076051, 1076052, 1076053, 1076054 and 1076055).

<sup>44</sup> Document No 1075321: Decision No 047/19/COL.

36. On 2 September 2019, Telenor submitted its reply to the SSO (“Reply to the SSO”<sup>45</sup>), in which it raised a number of objections to the Authority’s preliminary findings and conclusions and provided additional information.
37. Telenor exercised its right to request an Oral Hearing with the Authority, which was held on 10 October 2019 in Brussels.
38. On 25 October 2019, Telenor provided follow-up replies to certain questions asked during the Oral Hearing.<sup>46</sup>
39. On 7 November 2019, the Authority sent a request for information to Telenor concerning internal and external market research exercises/surveys undertaken by Telenor during the period from 1 January 2007 to 30 September 2013 in respect of mobile data services in Norway.<sup>47</sup> Telenor replied to this request for information on 15 November 2019,<sup>48</sup> and it submitted comments on the market surveys concerned on 10 December 2019.<sup>49</sup>
40. A status update call was held with Telenor on 13 December 2019.
41. On 13 January 2020, the Authority sent a request for information<sup>50</sup> to Nkom,<sup>51</sup> requesting documents and reports of surveys conducted by Nkom and/or other stakeholders during the period 2008–2012, as well as requesting information/presentations received from stakeholders on the substitutability between mobile broadband and fixed broadband services during the period 2008–2012. Nkom replied to this request for information on 20 January 2020.<sup>52</sup>
42. During a State of Play meeting held by video conference on 12 February 2020, Telenor was informed of the Authority’s intention to send a letter of facts.

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<sup>45</sup> Telenor ASA and Telenor Norge AS’ reply to the EFTA Surveillance Authority’s Statement of Objections of 24 June 2019 in Case No 71480 Telenor: see Document No 1085651.

<sup>46</sup> See Document No 1093684.

<sup>47</sup> See Document No 1095066.

<sup>48</sup> See Document No 1097450.

<sup>49</sup> See Document No 1103119.

<sup>50</sup> See Document No 1097871.

<sup>51</sup> On 1 January 2015 the Norwegian Post and Telecommunications Authority (NPT) changed its name to the Norwegian Communications Authority (*Nasjonal kommunikasjonsmyndighet*, hereafter “Nkom”). In this Decision, this authority is referred to as “Nkom”, including when reference is made to decisions and processes that applied for the period when the authority was known as the NPT.

<sup>52</sup> See Document No 1109079.

43. This letter of facts (“LoF”) was sent to Telenor on 27 February 2020<sup>53</sup> in order to provide it with the opportunity to comment on:
- (i) pre-existing evidence that was not expressly relied on in the SO and the SSO, but which, on further analysis of the file, the Authority considered might be relevant to support the preliminary conclusions reached in the SO and the SSO;
  - (ii) additional evidence brought to the Authority’s attention after the adoption of the SSO; and
  - (iii) sensitivity calculations as a robustness check regarding Telia and Telenor’s wholesale customers’ margins.
44. Along with the LoF, the Authority granted Telenor access to all documents that were included in the file after issuing the SSO. As the Authority also relied on a limited amount of information that was confidential vis-à-vis Telenor in the LoF, Telenor’s external advisors were granted the possibility to access this confidential information via a data room procedure. Telenor did not, however, avail of this possibility.
45. Telenor replied to the LoF on 23 March 2020 (“Reply to the LoF”<sup>54</sup>).
46. On 30 April 2020, the Authority sent a request for information<sup>55</sup> to Telenor requesting turnover-related data. Telenor replied to this request for information on 15 May 2020.<sup>56</sup>
47. By e-mail of 18 May 2020,<sup>57</sup> the Authority sent a question to Telenor concerning underlying documents regarding the two-part data pricing option (see Section 10.4.2.3.5 below). Telenor replied to that question by e-mail of 25 May 2020.<sup>58</sup>
48. A status call with Telenor’s counsel took place on 5 June 2020.

## 4 THE MOBILE COMMUNICATIONS SERVICES VALUE CHAIN

### 4.1 Introduction

49. Mobile communication services, such as residential stand-alone MBB services, are provided over a mobile communications network (“mobile network” or “mobile telephone network”).

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<sup>53</sup> See Document No 1110474.

<sup>54</sup> See Document No 1123012 (cover letter); Document No 1133599 (confidential version of the reply); Document No 1123306 (cover e-mail regarding non-confidential version of the reply); Document No 1135608 (Appendix 1); Document No 1133600 (Appendix 2) and Document No 1133601 (Appendix 3).

<sup>55</sup> See Document No 1130626 (transmission e-mail) and Document No 1126651.

<sup>56</sup> See Document No 1133295 (cover e-mail) and Document No 1133296. A revised version was sent on the same day: see Document No 1133371 (cover e-mail) and Document No 1133372.

<sup>57</sup> See Document No 1133872.

<sup>58</sup> See Document No 1134573.

50. A mobile network is a communications network where the connection between the fixed infrastructure and the end user is wireless. The network consists of fixed communications towers (masts) distributed over land areas, which use electromagnetic radio frequencies to transmit wireless communication signals. Each tower provides network coverage in a limited area and together these towers create uninterrupted wireless connectivity over a wider geographic area.
51. A mobile network enables end users to make and receive calls, send and receive SMS/MMS and obtain mobile data services (for example residential stand-alone MBB services), wirelessly and while moving within the network ('on the go'). End users can connect to the network via a number of different devices, such as tablets, PC-laptops and computers with cellular connectivity, as well as mobile telephones and smartphones.<sup>59</sup>
52. In order to offer these retail services to end users, providers of mobile communications services must either own a mobile network or have an access agreement with an owner of such a network.
53. In the mobile communications services value chain there are therefore two levels of trade to consider: (i) the *upstream* level for the provision of *wholesale* access and origination services to providers of mobile communications services that do not own a nationwide network;<sup>60</sup> and (ii) the *downstream* level for the provision of *retail* access and mobile communications services to end users.

#### 4.2 The upstream level of trade

54. Access to a public mobile communications network is a precondition for providers wishing to offer retail mobile communications services (such as mobile voice, SMS/MMS, MTDS and MBB) to end users.
55. Certain providers control all the infrastructure necessary to offer retail mobile communications services to end users, while other operators (partly or entirely) depend

<sup>59</sup> For the sake of completeness, the Authority notes that mobile wireless capability is also increasingly incorporated into devices such as smart (utility) meters and vehicle-tracking equipment and demand for these so-called machine-to-machine services ("M2M") is growing.

<sup>60</sup> While the regulatory framework for mobile communications services did not exclude the possibility for a distinction to arise between the supply of wholesale mobile network *access* and wholesale mobile (call) *origination* services as separate inputs, this did not materialise in practice and both have typically been supplied together (as has similarly been the case for data, see also footnote 3 above). By contrast this distinction did arise in fixed communications services where wholesale call origination, for example, traditionally enabled alternative operators to offer the voice calls service independently of the access connection/line. See the European Commission's "Explanatory Memorandum to the Commission Recommendation on Relevant Product and Service Markets within the electronic communications sector susceptible to *ex ante* regulation in accordance with Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communications networks and services", 2003, ("Commission's 2003 Explanatory Memorandum"), page 30 (available at: [https://www.rtr.at/en/tk/Empfehlungen/1441\\_Commission\\_Recommendation\\_2003\\_311\\_Memorandum.pdf](https://www.rtr.at/en/tk/Empfehlungen/1441_Commission_Recommendation_2003_311_Memorandum.pdf)), accessed June 2020).

on being able to buy access to this infrastructure at the wholesale level to be able to offer such services.

#### 4.2.1 Mobile Network Operators (the supply side)

##### 4.2.1.1 Introduction

56. As noted by Nkom<sup>61</sup> and by the European Commission,<sup>62</sup> the supply side of the wholesale market for access and origination services on public mobile telephone networks is represented by MNOs, which own their mobile networks.
57. An MNO controls its own mobile network infrastructure. To that end, an MNO must *inter alia*: (i) acquire licences to utilise electromagnetic spectrum to transmit signals; (ii) build extensive networks of radio transmitters and receivers at telecommunications towers and other sites (so-called mobile base stations of the radio access network or RAN); (iii) build or lease a mobile backhaul network (i.e. a transport network connecting the core network and the RAN network);<sup>63</sup> and (iv) manage its core network platforms.<sup>64</sup>
58. An MNO provides access and origination services on its network to its own vertically-integrated downstream retail division (self-supply or internal supply). In addition, it can sell wholesale access and origination services externally to third parties (wholesale customers). Based on this wholesale access, these wholesale customers provide retail mobile communications services to end users, in competition with the MNO's retail division.

##### 4.2.1.2 MNOs in Norway during the Period under Consideration

59. During the Period under Consideration, there were four mobile networks in Norway: those of Telenor, Telia,<sup>65</sup> Nordisk Mobiltelefon (ICE<sup>66</sup>) and Mobile Norway.

<sup>61</sup> See Sections 2.2.4, 3.1 and 3.5.1 of Nkom's 2006, 2010 and 2016 market analyses respectively (for the full references, see footnotes 120, 135 and 149 respectively). These market analyses are discussed in Section 5.2 below.

<sup>62</sup> See the European Commission's Decisions in cases M.7758 – *Hutchison 3G Italy/Wind/JV*, Section 6.3; M.7612 – *Hutchison 3G UK/Telefónica UK*, Section 7.3; M.7018 – *Telefónica Deutschland/E-Plus*, Section 5.2; M.6992 – *Hutchison 3G UK/Telefónica Ireland*, Section 6.1.2; M.6497 – *Hutchison 3G Austria/Orange Austria*, Section 5.2.2; M.5650 – *T-Mobile/Orange*, paragraph 28; and M.4947 – *Vodafone/Tele2Italy/Tele2 Spain*, paragraph 15.

<sup>63</sup> For a more detailed description, see: <<https://www.gsma.com/futurenetworks/wiki/mobile-backhaul-an-overview/>>, accessed June 2020.

<sup>64</sup> *Mobile backhaul* refers to the transport network that connects the RAN (Radio Access Network) to the core or backbone of the mobile network and it may include both wired and wireless components. For a description of the typical core network platforms of MNOs, see Section 3.4.2 of the European Commission's mobile cost model – Descriptive manual (accessible at: <<https://ec.europa.eu/digital-single-market/en/news/finalisation-mobile-cost-model-roaming-and-delegated-act-single-eu-wide-mobile-voice-call>>, accessed June 2020).

<sup>65</sup> See footnote 69 below for a description of Telia.

<sup>66</sup> See paragraph 70 below for a description of ICE.

60. However, only the networks of Telenor and Telia had nationwide coverage. Consequently, these two MNOs were the only ones throughout the entire Period under Consideration that offered nationwide wholesale access and origination services and retail mobile communications services exclusively based on their own infrastructure. This is still the case today. Currently, Norway is the only EEA country with just two nationwide mobile networks and with the third mobile network still heavily reliant on national roaming.

#### 4.2.1.2.1 *MNOs with nationwide coverage: Telenor and Telia*

61. Mobile communications services were first introduced in Norway in 1981 when Telenor – then the incumbent monopolist Televerket – built a first generation (“1G”) NMT<sup>67</sup> 450 network. In 1986, Televerket expanded and added an NMT 900 network.<sup>68</sup>
62. In 1991, mobile communications services markets were liberalised, and two companies, Telenor and NetCom AS (“Telia”),<sup>69</sup> were granted licences to build and operate GSM 900 MHz mobile networks based on the second generation (“2G”) GSM network technology.<sup>70</sup>
63. In 1998, Telenor and Telia were granted additional 2G spectrum licences in the 1800 MHz frequency band. These networks primarily transmitted voice and text messages. The amount of mobile data transmitted was limited.
64. Spectrum licences for third generation (“3G”) network technology – UMTS<sup>71</sup> – were granted to Telenor and Telia in 2000.<sup>72</sup>

<sup>67</sup> NMT stands for *Nordic Mobile Telephone* system and was an analogue mobile telephone system (first generation or 1G), developed by the Telecommunication Administrations of Denmark, Finland, Norway and Sweden. Two variants exist: NMT-450 and NMT-900. The numbers indicate the frequency bands used.

<sup>68</sup> The NMT 900 network was shut down in 2001 and the NMT 450 network was subsequently shut down in December 2004.

<sup>69</sup> The name NetCom AS was changed to TeliaSonera Norge AS in January 2011. On 1 March 2016, the name changed to Telia Norge AS; see Nkom’s 2016 Market Analysis (for the full reference, see footnote 149 below), footnote 17 and paragraph 176). For the remainder of this document, the references to “Telia” include where relevant NetCom AS, TeliaSonera Norge AS, Telia Norge AS and the parent company TeliaSonera AB (which changed its name to Telia Company AB in April 2016).

<sup>70</sup> GSM, which stands for *Global System for Mobile communication*, is a digital mobile communications system.

<sup>71</sup> UMTS stands for *Universal Mobile Telecommunications System*, which refers to 3G mobile technology that can deliver higher capacity data/broadband services than under 2G mobile technology. 3G can be used for applications such as mobile voice telephony, SMS and mobile internet access services, as well as to connect to fixed wireless internet access (so-called Wi-Fi).

<sup>72</sup> In 2003, Hi3G Access Norway AS (owned by Hi3G in Sweden, which was part of the multinational company Hutchison Whampoa) acquired a spectrum licence to build UMTS networks in Norway; see Nkom’s 2010 Market Analysis (for the full reference: see footnote 135 below), paragraphs 72, 94 and 389. However, in March 2011, the company handed back its licence, without having initiated any business activities, despite considerable accrued sunk costs; see Nkom’s 2016 Market Analysis (for the full reference: see footnote 149 below), paragraph 218.

65. Telenor launched its 3G network in December 2004 and Telia in February 2005.<sup>73</sup>
66. In 2007, Telenor and Telia subsequently introduced HSDPA<sup>74</sup> technology (“Turbo 3G” or “3.5G”). Turbo 3G increased maximum data transfer speeds tenfold, providing transfer speeds of up to 3.6 megabits per second (“Mbit/s”).<sup>75</sup> The change to 3G and subsequently 3.5G technology facilitated the expansion of mobile data services.
67. Telia launched its fourth generation/long-term evolution network (“4G” or “LTE”<sup>76</sup>) in December 2009 in Oslo.<sup>77</sup> Telenor launched its 4G/LTE network in October 2012 in 11 cities and towns.<sup>78</sup>
68. In December 2013, Nkom conducted a spectrum auction in the 800/900/1800 MHz bands for the following 20 years. Telia, Telenor and Telco Data AS (“Telco Data”)<sup>79</sup> (see paragraph 70 below) all won a spectrum licence in each of these bands.<sup>80</sup>

#### 4.2.1.2.2 ICE

69. In June 2004, the company Nordisk Mobiltelefon was awarded an authorisation to establish a 3G mobile network based on the CDMA 450 technology.<sup>81</sup>
70. In 2006, the company launched MBB services under the brand name *ICE.net*<sup>82</sup> and started building a mobile network. However, the company encountered financial problems and was declared bankrupt in February 2009. The network was purchased by a U.S. company, Access Industries Inc. (“Access Industries”), which has continued its operations. Access Industries also owned Telco Data, the company which won frequencies in the 800/900/1800 MHz frequency auction held in Norway in December 2013 (see paragraph 68 above). In the remainder of this Decision, the term “ICE” is used

<sup>73</sup> See Nkom’s 2010 Market Analysis (for the full reference, see footnote 135 below), paragraph 84.

<sup>74</sup> HSDPA stands for *High Speed Downlink Packet Access* and is a technology upgrade for UMTS networks.

<sup>75</sup> By 2014, 3G had a theoretical maximum speed of 42 Mbit/s.

<sup>76</sup> LTE stands for *Long Term Evolution* and is a 4G wireless broadband standard.

<sup>77</sup> See: <<https://www.teliacompany.com/en/about-the-company/history/first-in-the-world-with-4g/>>, accessed June 2020.

<sup>78</sup> See Telenor press release of 10 October 2012; available at: <<https://www.telenor.com/media/press-release/telenor-norway-launches-the-next-generation-mobile-network>>, accessed June 2020.

<sup>79</sup> Telco Data AS, which was granted a spectrum licence, later changed its name to ICE Communication Norge AS, as a sister company to ICE Norge AS, which runs the mobile broadband business ice.net: see Nkom’s 2016 Market Analysis (for the full reference, see footnote 149 below), footnote 18 and Ice Group press release of 6 March 2014 (available at: <<https://icegroup.com/news/telco-data-becomes-integrated-in-fully-financed-ice>>, accessed June 2020).

<sup>80</sup> See Nkom’s 2016 Market Analysis (see footnote 149 below for full reference), paragraphs 53, 182, 243 and 441.

<sup>81</sup> CDMA stands for Code-Division Multiple Access. This was the same frequency band as for the 1G network that Telenor was closing down. For a description of the CDMA 450 technology, see: <<http://www.cdg.org/technology/cdma450.asp>>, accessed June 2020.

<sup>82</sup> ICE.net did not offer mobile voice services until it purchased part of the former Mobile Norway’s infrastructure in 2015 (see paragraph 77 below).

for Nordisk Mobiltelefon and its successor Access Industries, Telco Data and its successor ICE Communication Norge AS and sister company ICE Norge AS.

71. During the Period under Consideration, however, ICE's network did not have nationwide coverage.<sup>83</sup>
72. In addition, the ICE network only allowed MBB and M2M services and not mobile voice telephony until the purchase of (parts of) Tele2's (Mobile Norway's) network in 2015.<sup>84</sup> This was mainly due to the fact that the ICE network was based on a specific technology, namely CDMA 450, for which there are no handsets (mobile phones) that are (or were) compatible with GSM and UMTS networks, which rules out national and international roaming.<sup>85</sup> In its 2010 Market Analysis, Nkom considered that *inter alia* for this reason it was highly unlikely that ICE would contribute to any degree to competition at the wholesale level in the market for access and origination on mobile networks within the time horizon of the analysis.<sup>86</sup>

#### 4.2.1.2.3 Mobile Norway

73. In September 2007, Tele2 Norge AS ("Tele2") and NwN<sup>87</sup> announced that they wanted to build a mobile network together through the network company AMI AS, which later changed its name to Mobile Norway AS ("Mobile Norway"). Mobile Norway was thus jointly owned by Tele2 and NwN.<sup>88</sup> In the spectrum auction that ended on 12 December

<sup>83</sup> In June 2008, ICE's network covered 75% of Norway's territory, see: <[https://www.tek.no/artikler/ice\\_net\\_firedobler\\_rekkevidden/52707](https://www.tek.no/artikler/ice_net_firedobler_rekkevidden/52707)>, accessed June 2020. See also Document No 1116844, ICE's press release of 11 May 2010, which states that its network covered 75% of the territory in Norway (available at: <[https://news.cision.com/no/ice-net/r/ice-norge-i-sterk-vekst\\_c490146](https://news.cision.com/no/ice-net/r/ice-norge-i-sterk-vekst_c490146)>, accessed June 2020). The Authority further refers to paragraph 181 of Nkom's 2016 Market Analysis (for the full reference, see footnote 149 below), where Nkom notes the following: "*The company has more than 75 per cent geographical coverage in this network*". This shows that even in 2016, ICE's network did not have nationwide coverage.

<sup>84</sup> See paragraph 77 below.

<sup>85</sup> See Nkom's 2010 Market Analysis (for the full reference: see footnote 135 below), paragraph 95. See also the Norwegian NCA's Decision V2015-1, *TeliaSonera AB - Tele2 Norway AS/Network Norway* of 5 February 2015, ("the Norwegian NCA's Merger Decision V2015-1"; Document No 1075334), paragraph 381: "*As stated in several places in the decision, ICE's offer today is based on CDMA technology in the 450 MHz band. The technology is not compatible with other mobile network operators' technology and requires other devices to be used. [...]*", the Authority's translation of the following extract: "*Som det fremgår flere steder i vedtaket er ICE sitt tilbud i dag basert på CDMA-teknologi i 450 MHz-båndet. Teknologien er ikke kompatibel med øvrige mobilnettsoperatørens teknologi og krever andre enheter for å kunne benyttes. [...]*".

<sup>86</sup> See Nkom's 2010 Market Analysis (for the full reference: see footnote 135 below), paragraph 95.

<sup>87</sup> NwN had taken over Norway's third GSM licence in 2005 (see Nkom's 2010 Market Analysis (for the full reference: see footnote 135 below), paragraph 85) from Møllergruppen AS, which had taken over the licence in 2004 from BaneTele, a state-owned telecommunications enterprise (see: <<https://www.digi.no/artikler/moller-gruppen-gir-telenor-konkurranse/292800>> and <<https://www.digi.no/artikler/skal-bygge-mobilnett-for-bedrifts-norge/314878>>, both accessed June 2020).

<sup>88</sup> See Nkom's 2010 Market Analysis (for the full reference: see footnote 135 below), paragraph 87.

- 2007, Mobile Norway won a spectrum licence in the 2100 MHz band for establishing mobile networks based on the 3G technology.<sup>89</sup>
74. In July 2011, Tele2 Sverige AB acquired NwN, including its 50% share in Mobile Norway.<sup>90</sup> Tele2 thus became the sole owner of Mobile Norway.
  75. The coverage of the Mobile Norway network was rather limited during the main part of the Period under Consideration. For example, it covered less than 17% of the Norwegian population in July 2009 and less than 27% at the beginning of July 2011.<sup>91</sup> By the end of the Period under Consideration (end of 2012), the population coverage was 60%<sup>92</sup>–65%.<sup>93</sup> Mobile Norway’s network only reached 75% population coverage at the end of 2013.<sup>94</sup>
  76. Following the unsuccessful outcome of the December 2013 auction for Tele2,<sup>95</sup> the latter stated publicly that, due to the lack of a spectrum licence, it would no longer continue rolling out its network infrastructure and would rely on national roaming.<sup>96</sup>
  77. In 2015, Tele2 was acquired by Telia. The Norwegian national competition authority, Konkurransetilsynet (“the Norwegian NCA”), approved the merger on 5 February 2015 subject to a number of conditions.<sup>97</sup> One of the conditions for the approval was that ICE

<sup>89</sup> See Nkom’s 2010 Market Analysis (for the full reference: see footnote 135 below), paragraph 87.

<sup>90</sup> See Tele2’s press release of 22 July 2011: “*Tele2 Sverige has entered into an agreement to acquire Norwegian mobile operator Network Norway*” (available at: <<http://www.tele2.com/media/press-releases/2011/tele2-sverige-has-entered-into-an-agreement-to-acquire-norwegian-mobile-operator-network-norway>>, accessed June 2020).

<sup>91</sup> See Reply to the SO, Table 4 at paragraph 247.

<sup>92</sup> See Document No 680811, page 8, where the Norwegian Ministry of Transport and Communications noted that the population coverage was 60% at the moment of adoption of its decision (20 December 2012).

<sup>93</sup> See Table 4 at paragraph 247 of the Reply to the SO; where it is reported that the population coverage of Mobile Norway’s network was 65.2% on 1 January 2013.

<sup>94</sup> Both Nkom and the Norwegian Ministry of Transport and Communications considered that it was not possible to compete effectively with Telenor and Telia in the wholesale market with only 75% network coverage: see Nkom’s 2016 Market Analysis (for the full reference: see footnote 149 below), paragraph 206 and Document No 680811, the Norwegian Ministry of Transport and Communications’ Decision of 20 December 2012, Section 6.3, page 10.

<sup>95</sup> In the December 2013 auction (see paragraph 68 above), Tele2 won no spectrum licences and, as of 1 October 2014, could no longer use spectrum licences in the 900 MHz band. ICE was authorised to use these spectrum licences from 1 October 2014.

<sup>96</sup> See Nkom’s draft 2014 Market Analysis (for the full reference: see footnote 136 below), page 20; see also: <<http://www.tu.no/it/2013/12/12/slik-skal-et-vingeklippet-tele2-takle-fremtiden>>, accessed June 2020. For a description of national roaming, see paragraph 80 below.

<sup>97</sup> See the Norwegian NCA’s Merger Decision V2015-1. See also the Norwegian NCA’s press release: “*The Norwegian Competition Authority clears the acquisition of Tele2 by TeliaSonera, subject to conditions*” (available at: <<https://konkurransetilsynet.no/the-norwegian-competition-authority-clears-the-acquisition-of-tele2-by-telifasonera-subject-to-conditions/?lang=en>>, accessed June 2020).

would have the opportunity to purchase part of Tele2's (Mobile Norway's) network/infrastructure (base stations).<sup>98</sup>

#### 4.2.2 Wholesale access buyers (the demand side)

78. On the demand side, providers that do not control all of the infrastructure necessary to offer retail mobile communications services to end users must buy access to a mobile communications network from an external supplier.
79. The type of network access that a wholesale customer requires will generally depend on the extent of its own infrastructure. Such customers can be classified into: (i) national roaming operators; (ii) mobile virtual network operators; or (iii) service providers. These wholesale customers are also referred to collectively as non-MNOs, even where, as described further below, they may possess certain network infrastructure.
80. A national roaming operator ("NRO") controls its own frequency resources, since it has a licence to utilise electromagnetic spectrum and a radio access network. While it is in the process of rolling out its own nationwide physical network, an NRO lacks access in specific areas and therefore needs to buy access from MNOs to cover those areas. Such an operator therefore depends on a national roaming agreement ("NR agreement") with an MNO for those areas.<sup>99</sup>
81. An NRO can in principle also be a supplier in the wholesale market for access and origination services, based on its own mobile network supplemented by the resale of services purchased through an NR agreement with an MNO.
82. NwN is an example of an NRO. It entered into an NR agreement with Telia and launched its commercial activities in February 2007. In April 2008, it entered into an NR agreement with Telenor and terminated the agreement with Telia at the same time (see paragraphs 515 and 516 below). The agreement with Telenor gave NwN the right to use Telenor's GSM and UMTS networks.<sup>100</sup>
83. A mobile virtual network operator ("MVNO") lacks a licence to utilise electromagnetic spectrum and a radio access network.<sup>101</sup> It must buy all its access and origination services

<sup>98</sup> See also ICE's press release of 1 October 2014: "*Ice and Tele2 Norway sign agreement on frequency lease and purchase of infrastructure*": available at: <<https://www.tele2.com/media/press-releases/2014/ice-and-tele2-norway-sign-an-agreement-on-frequency-lease-and-purchase-of-infrastructure>>, accessed June 2020. As indicated in paragraph 68 above, ICE (Telco Data) won the third spectrum licence during the auction of December 2013.

<sup>99</sup> NR thus refers to an agreement with an MNO to use the MNO's network to provide services in geographic areas where the NRO concerned does not (yet) have coverage. Such an agreement enables a subscriber (end user) to use another operator's mobile network in areas where the subscriber's own operator does not have coverage.

<sup>100</sup> See NR Agreement between Telenor and NwN of 3 April 2008 (Document No 657260 - EES 27); see also Nkom's 2010 Market Analysis (for the full reference: see footnote 135 below), paragraph 85.

<sup>101</sup> Contrary to an NRO, an MVNO does not operate its own radio access network and does not hold its own spectrum.

- from an external supplier (i.e. an MNO or NRO). However, it has its own core network<sup>102</sup> and all the technical systems necessary for interconnection and roaming with other network operators.<sup>103</sup>
84. An MVNO can, in principle, also be a supplier in the wholesale market for access and origination services, by reselling these services to service providers or, in principle, to other MVNOs.
  85. Ventelo and TDC were among the largest MVNOs in Norway during the Period under Consideration. They each had an MVNO agreement with Telenor since 2005.<sup>104</sup>
  86. Tele2 had an MVNO agreement with Telenor from 2002 (prior to the roll-out of its own network in the joint venture with NwN).<sup>105</sup> However, Tele2 switched to an MVNO agreement on Telia's network when the agreement came to an end in the spring of 2008<sup>106</sup> (see paragraph 514 below).
  87. A service provider ("SP") is a pure reseller. It lacks a licence to utilise electromagnetic spectrum and a radio network and does not have any own infrastructure. Contrary to NROs and MVNOs, it does not issue its own SIM cards either. It has to rely on one or more wholesale access providers for all of its infrastructure and service delivery needs.
  88. An SP can, in principle, resell wholesale access and origination services to other SPs.
  89. Hello AS ("Hello") and Phonero AS ("Phonero") are examples of SPs that had an access agreement with Telenor.<sup>107</sup>

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<sup>102</sup> The core of a mobile communications network can be distinguished from its radio access network. The core is the backbone part of the network and has different functionalities, such as routing of telephone calls, aggregation of traffic or authentication functionalities. See also footnote 64 above.

<sup>103</sup> An MVNO will have its own IMSI code (International Mobile Subscriber Identity/Identification Code), i.e. a unique number used in a mobile network to give each customer a unique identity, and to specify the SIM card's home network and nationality, its own mobile network code (MNC) and will offer its own subscriptions (SIM cards) and services to end users (for further details, see Nkom's 2010 Market Analysis (for the full reference: see footnote 135 below), paragraph 92).

<sup>104</sup> See Nkom's 2006 Market Analysis (for the full reference: see footnote 120 below), paragraph 42 and 74. See Document No 657260 – EES 39 (MVNO agreement between Telenor and Ventelo dated 20 October 2005) and Document No 657260 – EES 53 (MVNO Agreement between Telenor and TDC dated 30 October 2005).

<sup>105</sup> See Nkom's 2006 Market Analysis (for the full reference: see footnote 120 below), paragraph 42 and 74. See MVNO/NR Agreement between Telenor and Tele2, dated 13 September 2002 (Document No 1135193).

<sup>106</sup> See Nkom's 2010 Market Analysis (for the full reference: see footnote 135 below), paragraph 90. See Document No 847815, MVNO agreement between Telia and Tele 2 dated 11 May 2007.

<sup>107</sup> Regarding Hello, see Annex 7 – prices, Document No 690710, applicable from 01/06/2012; see also Document No 690709 – applicable from 01/01/2013; Document No 690690, applicable from 01/02/2013; Document No 690708 – applicable from 01/09/2013; and Document No 690707 – applicable from 01/07/2013. Regarding Phonero, see Annex 7 – prices, Document No 690711, applicable from 01/07/2013; and Document No 690712 – applicable from 01/09/2013. Phonero and Ventelo merged in July 2014, i.e. after the Period under Consideration.

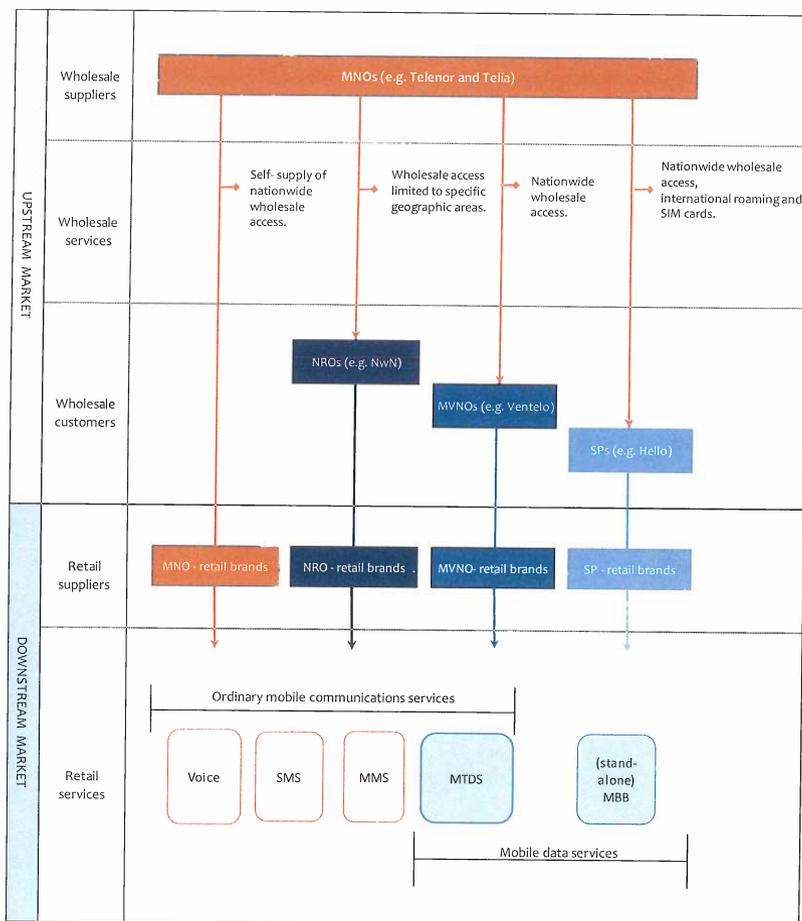
#### **4.3 The downstream level of trade**

90. Based on the wholesale input, i.e. access and origination services on a public mobile telephone network, providers can offer both ordinary mobile communications services and stand-alone MBB services at retail level to end users (i.e. business and government customers and/or residential/private consumers).

### 4.4 Schematic overview

91. The mobile network value chain can be illustrated in a simplified manner as follows:

**Figure 1: Mobile network value chain – schematic overview**



## 5 REGULATORY BACKGROUND

### 5.1 Regulatory framework

92. The electronic communications sector in Norway is subject to sector-specific regulation. This was also the case throughout the Period under Consideration.
93. The regulatory framework for electronic communications services in force in the European Union (“EU”) during the Period under Consideration was adopted in 2002. This regulatory framework employs competition law principles to identify markets where regulation should be imposed or removed, and is based on five directives, including the “Framework Directive”.<sup>108</sup>
94. The EU regulatory framework is incorporated into EEA law and was implemented in Norway with effect from 1 November 2004 (hereafter referred to as “the EEA regulatory framework”). The five directives were implemented into Norwegian law through, *inter alia*, the Electronic Communications Act of 4 July 2003 No 83 (“the eCom Act”) and the Regulation of 16 February 2004 No 401 relating to Electronic Communications Networks and Services (“the eCom Regulation”).
95. The Authority’s 2004 Recommendation on relevant markets set out a list of markets that were considered susceptible to *ex ante* regulation at that time, including the wholesale market for access and call origination on public mobile telephone networks (“Market 15”).<sup>109</sup> The 2004 Recommendation on relevant markets was replaced by the 2008 Recommendation on relevant markets.<sup>110</sup> The latter removed Market 15 from the list of

<sup>108</sup> Directive 2002/21/EC of the European Parliament and of the Council of 7 March 2002 on a common regulatory framework for electronic communications networks and services, OJ L 108, 24.4.2002, p. 33, as referred to in point 5(c) of Annex XI to the EEA Agreement, as adapted to the Agreement by Protocol 1 thereto and by the sectoral adaptations contained in Annex XI to that Agreement (“Framework Directive”). The other directives are the following: Directive 2002/20/EC of the European Parliament and of the Council of 7 March 2002 on the authorisation of electronic communications networks and services, OJ L 108, 24.4.2002, p. 21 (“Authorisation Directive”); Directive 2002/19/EC of the European Parliament and of the Council of 7 March 2002 on access to, and interconnection of, electronic communications networks and associated facilities, OJ L 108, 24.4.2002, p. 7 (“Access Directive”); Directive 2002/22/EC of the European Parliament and of the Council of 7 March 2002 on universal service and users’ rights relating to electronic communications networks and services, OJ L 108, 24.4.2002, p. 51, (“Universal Service Directive”); and Directive 2002/58/EC of the European Parliament and of the Council of 12 July 2002 concerning the processing of personal data and the protection of privacy in the electronic communications sector, OJ L 201, 31.7.2002, p. 37 (“Directive on privacy and electronic communications”). In December 2018 a new regulatory framework for electronic communications was adopted and shall enter into force in the EU no later than by the end of 2020 (see Directive (EU) 2018/1972 of the European Parliament and of the Council of 11 December 2018 establishing the European Electronic Communications Code, OJ L 321, 17.12.2018, p. 35).

<sup>109</sup> EFTA Surveillance Authority Recommendation (Decision No 194/04/COL) of 14 July 2004 on relevant product and service markets within the electronic communications sector susceptible to *ex ante* regulation in accordance with the Framework Directive, OJ L 113, 27.4.2006, p. 18 (“the 2004 Recommendation on relevant markets”).

<sup>110</sup> EFTA Surveillance Authority Recommendation of 5 November 2008 (Decision No 688/08/COL) on relevant product and service markets within the electronic communications sector susceptible to *ex ante* regulation in accordance with the Framework Directive, OJ C 156, 9.7.2009, p. 18 (“the 2008 Recommendation on relevant markets”). In this Recommendation, the number of pre-defined markets for *ex ante* regulation was reduced from 18 to 7. The European Commission then revised the list of relevant markets and adopted a new Recommendation

relevant markets considered susceptible to *ex ante* regulation at EEA level, but allowed national regulatory authorities (“NRAs”), in this case Nkom, to continue to impose *ex ante* regulation in the market, provided certain criteria were met (the so-called ‘three-criteria test’<sup>111</sup>). Nkom has consistently found the wholesale market for access and call origination on public mobile telephone networks (Market 15) to meet the three-criteria test and that the market is therefore susceptible to *ex ante* regulation at national level.

96. In order to impose *ex ante* regulation in a relevant market in the electronic communications sector, Nkom must show *inter alia* that an operator has significant market power (“SMP”).<sup>112</sup> The term SMP is a synonym for dominance within the meaning of Article 54 EEA.<sup>113</sup>
97. In accordance with Articles 15 and 16 of the Framework Directive, Nkom defines relevant markets and conducts analysis of the electronic communications markets at regular intervals to assess whether there are operators with SMP that make *ex ante* regulation necessary. This analysis typically has a forward-looking time horizon of two to three years and is therefore limited in its outlook.<sup>114</sup>
98. Nkom is also under an obligation to notify its *ex ante* regulatory decisions to the Authority.<sup>115</sup> The Authority has a veto right<sup>116</sup> if it considers that EEA law has not been correctly applied when defining the relevant market or when designating an operator with SMP. To date, the Authority has always (i.e. in 2006, 2010, 2016 and 2020) found that

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on 9 October 2014 (Commission Recommendation of 9 October 2014 on relevant product and service markets within the electronic communications sector susceptible to *ex ante* regulation in accordance with the Framework Directive, OJ L 295, 11.10.2014, p. 79). The Authority adopted an identical Recommendation for the EEA-EFTA countries on 11 May 2016; EFTA Surveillance Authority Recommendation of 11 May 2016 (Decision No 093/16/COL) on relevant product and service markets within the electronic communications sector susceptible to *ex ante* regulation in accordance with Framework Directive, OJ L 84, 30.3.2017, p. 7 (“the 2016 Recommendation on relevant markets”).

<sup>111</sup> In accordance with Point 2 in conjunction with Recitals 6 and 22 of the 2008 Recommendation on relevant markets, and similarly in accordance with Point 2 in conjunction with Recitals 16 and 26 of the 2016 Recommendation on relevant markets, when identifying markets other than those mentioned in the Annex, NRAs should ensure that the following three criteria are cumulatively met: (1) there must be high and non-transitory entry barriers, (2) the structure of the market must not tend towards effective competition within the relevant time horizon, and (3) the application of competition law alone would not adequately address the market failure(s) concerned.

<sup>112</sup> See Articles 14 to 16 of the Framework Directive.

<sup>113</sup> See Article 14(2) of the Framework Directive; see also Commission Decision of 15 October 2014 in Case AT.39523 – *Slovak Telekom* (hereafter “*Slovak Telekom* Decision”), footnote 293. See also the Authority’s Guidelines of 14 July 2004 on market analysis and the assessment of significant market power under the regulatory framework for electronic communications networks and services (2006/C 101/01), paragraph 71 (“the Authority’s SMP Guidelines”).

<sup>114</sup> See Nkom’s 2006 Market Analysis (for the full reference: see footnote 120 below), paragraph 4.

<sup>115</sup> See <<https://www.eftasur.int/internal-market/notifications-and-applications/ecom-notifications>>, accessed June 2020.

<sup>116</sup> See Article 7 of the Framework Directive.

Nkom's market analyses for the wholesale market under consideration in the present case were compatible with EEA law.<sup>117</sup>

## 5.2 Nkom Decisions and Market Analyses

### 5.2.1 *The Norwegian NRA*

99. Under Section 3-2 and 3-3 of the eCom Act, Nkom has been directed to define and analyse relevant product/service and geographic markets in accordance with the Authority's Recommendation on relevant markets, and to identify any providers with SMP in those markets. Under Section 3-4 of the eCom Act, at least one of the specific obligations provided for in Chapter 4 of the eCom Act shall be imposed on providers that are deemed to have SMP.
100. With regard to the relevant wholesale market in the present case, i.e. the wholesale market for access and call origination on public mobile telephone networks in Norway, Nkom has, since the entry into force of the EEA regulatory framework, systematically designated Telenor as a provider with SMP. It has imposed specific obligations on Telenor in its SMP decisions of 23 January 2006, 5 August 2010, 1 July 2016 and 14 May 2020.<sup>118</sup>

### 5.2.2 *The 2006 Market Analysis and SMP Decision*

101. Nkom conducted its first analysis of the wholesale market for access and call origination on public mobile telephone networks in Norway in 2006 ("Nkom's 2006 SMP Decision"<sup>119</sup> and "Nkom's 2006 Market Analysis"<sup>120</sup>). It concluded that Telenor had SMP, with a market share of close to 70% in the wholesale market for access and call origination, and a market share of approximately 60% in the aggregate retail market in Norway.<sup>121</sup> Telenor's rival at the wholesale level, Telia, had a market share in the said wholesale market of around 30%.<sup>122</sup>

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<sup>117</sup> Letters from the Authority to Nkom, available on the Authority's online registry at: <https://www.eftasurv.int/internal-market/notifications-and-applications/ecom-notifications/ecom-documents/>, accessed June 2020.

<sup>118</sup> Available on the Authority's online registry at: <https://www.eftasurv.int/internal-market/notifications-and-applications/ecom-notifications/ecom-documents/>, accessed June 2020.

<sup>119</sup> See Nkom's "Decision on designating undertaking with significant market power and imposing specific obligations in the market for access and call origination on public mobile telephone networks (Market 15)" of 23 January 2006 (Document No 1135287 for the version in English and Document No 1135677 for the version in Norwegian). All references to Nkom's decisions and analyses in this Decision are made to the public versions unless otherwise specified. The same applies when referring to the Norwegian NCA's decisions.

<sup>120</sup> See Nkom's "Analysis of the market for access and call origination on public mobile telephone networks" of 23 January 2006 (Document No 1075856 for the version in English and Document No 1075319 for the version in Norwegian). This market analysis is annexed to Nkom's 2006 SMP Decision as Annex 1.

<sup>121</sup> See Nkom's 2006 Market Analysis, page 5 and paragraph 400.

<sup>122</sup> See Nkom's 2006 Market Analysis, page 4 and paragraph 399.

102. The wholesale market definition included all types of access seekers (NROs, MVNOs and SPs),<sup>123</sup> but no obligations were imposed on Telenor to ensure access for SPs. Nkom held that, for this customer group, there seemed to be some competition between Telenor and Telia. In addition, since Nkom, in accordance with its defined regulatory principle 3 (which emphasises infrastructure-based competition),<sup>124</sup> wanted to encourage access seekers to move upwards in the access supply-chain to become an MVNO or NRO (i.e. to climb the ladder of investment), the conditions for SPs were not meant to be too favourable. At the same time, Nkom recognised the value of stimulating competition in the short term and of monitoring the situation.<sup>125</sup>
103. The wholesale market did not include so-called “other mobile data services” (other than SMS), such as mobile internet access. Nkom noted that the use of such services was relatively limited at that moment, although it expected mobile data services to become widely available as 3G networks would come into service.<sup>126</sup>
104. The geographical scope was defined as Norway.<sup>127</sup>
105. In Nkom’s 2006 SMP Decision, obligations were imposed on Telenor in relation to wholesale access to voice and SMS/MMS services (NRO, MVNO access<sup>128</sup> and co-location<sup>129</sup>), but not to other mobile data services.<sup>130</sup> Other obligations were also imposed upon Telenor: non-discrimination, the publication of reference offers, accounting separation and price control requiring Telenor to offer national roaming (“NR”) and co-location at cost-oriented prices.<sup>131</sup> Nkom did not impose any price control mechanism with regard to MVNO access, although the accounting separation obligation was intended to monitor the obligation of non-discrimination in respect of MVNOs.
106. Nkom’s 2006 SMP Decision was appealed to the Norwegian Ministry of Transport and Communications, which upheld Nkom’s Decision, but changed the proposed price regulation to an obligation to offer access on a ‘retail-minus’ basis.<sup>132</sup>

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<sup>123</sup> See Nkom’s 2006 Market Analysis, paragraph 94.

<sup>124</sup> The regulatory objective set out in Nkom’s regulatory principle 3 is to facilitate long-term infrastructure-based competition as far as possible; see the Nkom’s 2006 SMP Decision, page 4.

<sup>125</sup> See the discussion in Nkom’s 2006 SMP Decision, page 4 and Section 8.1.4.1.

<sup>126</sup> See Nkom’s 2006 Market Analysis, paragraphs 125–127.

<sup>127</sup> See Nkom’s 2006 Market Analysis, Section 3.

<sup>128</sup> As indicated in paragraph 102 above, no access obligation was imposed in relation to SPs.

<sup>129</sup> According to the eCom Act, Section 1-5 paragraph 17, co-location (“*samløkalisering*”) is defined as “*the shared use of infrastructure or shared use of associated facilities that are being used or can be used for the placement of electronic communications equipment*” (translation by the Authority of: “*felles bruk av infrastruktur eller felles bruk av tilhørende fasiliteter som brukes eller kan bli brukt til plassering av utstyr for elektronisk kommunikasjon*”).

<sup>130</sup> See Nkom’s 2006 SMP Decision, Section 8.1.

<sup>131</sup> See Nkom’s 2006 SMP Decision, Sections 8.2 - 8.5 and 9.

<sup>132</sup> See Decision by the Norwegian Ministry of Transport and Communications of 6 October 2006: “*Klage over Post- og teletilsynets vedtak av 230106 om utpeking av tilbydere med sterk markedsstilling og pålegg om særskilte*”

### 5.2.3 The 2010 Market Analysis and SMP Decision

107. As explained at paragraph 95 above, in the 2008 Recommendation on relevant markets, the market for access and call origination on mobile telephone networks was no longer included in the list of markets susceptible to *ex ante* regulation. Nkom was therefore required to carry out an assessment (the so-called ‘three-criteria test’<sup>133</sup>) to confirm whether there were still sufficient competition concerns for *ex ante* regulation to be deemed necessary.
108. In 2009 and 2010, Nkom conducted a new analysis of the wholesale market for access and call origination on public mobile networks in Norway (see Nkom’s 2010 SMP Decision<sup>134</sup> and Nkom’s 2010 Market Analysis<sup>135</sup>). It again found that the market was susceptible to *ex ante* regulation and that Telenor had SMP. Telenor’s wholesale market share was 63%, while its aggregate retail market share was approximately 55%.<sup>136</sup>
109. This time, Nkom *did* include “other mobile data services” (other than SMS), such as mobile internet access, in the wholesale market.<sup>137</sup> Nkom noted that, in principle, these “other mobile data services” were sold at the wholesale level as part of a bundle, together with voice and SMS. In this way, the wholesale level differed from the retail level, where MBB services were also provided on a stand-alone basis, i.e. independently from mobile voice telephony and SMS. Nkom found that, at the retail level, the sale of such MBB subscriptions had grown rapidly and had taken on increasing importance in the battle for end users.<sup>138</sup>
110. The geographical scope was defined as Norway.<sup>139</sup>
111. At the network level, Nkom concluded that Telenor and Telia were still the only MNOs with nationwide mobile networks, but noted that Mobile Norway, owned jointly by NwN and Tele2, had entered the market and was building a third network. NwN relied on a

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*forpliktelse i markedet for tilgang til og samtaleoriginering i offentlige mobilkommunikasjonsnett -Telenor*”, available at: <[https://www.regjeringen.no/globalassets/upload/kilde/sd/red/2002/0038/ddd/pdfv/292583-klage\\_over\\_post-og\\_teleilsynests\\_vedtak\\_av\\_23.01.06.pdf](https://www.regjeringen.no/globalassets/upload/kilde/sd/red/2002/0038/ddd/pdfv/292583-klage_over_post-og_teleilsynests_vedtak_av_23.01.06.pdf)>, accessed June 2020.

<sup>133</sup> See footnote 111 above.

<sup>134</sup> See Nkom’s “Decision on designating undertakings with significant market power and imposing specific obligations in the market for access and call origination on public mobile telephone networks (former Market 15)” of 5 August 2010 (“Nkom’s 2010 SMP Decision”: Document No 1075859 for the version in English and Document No 1135670 for the version in Norwegian).

<sup>135</sup> See Nkom’s “Analysis of the market for access and call origination on public mobile telephone networks” of 5 August 2010 (“Nkom’s 2010 Market Analysis”: Document No 1075858 for the version in English and Document No 1075324 for the version in Norwegian). This market analysis is annexed to Nkom’s 2010 SMP Decision as Annex 1.

<sup>136</sup> See Nkom’s 2010 Market Analysis, Sections 4.2.3.1, 4.2.3.2 and 5.2 and Nkom’s 2016 Market Analysis (see footnote 149 below), Section 5.3.4, where the traffic figures previously removed on a confidentiality basis from Nkom’s 2010 Market Analysis were made public.

<sup>137</sup> See Nkom’s 2010 Market Analysis, Section 2.3.7.

<sup>138</sup> See Nkom’s 2010 Market Analysis, paragraph 62.

<sup>139</sup> See Nkom’s 2010 Market Analysis, Section 2.4.

NR agreement with Telenor<sup>140</sup> and Tele2 relied on an MVNO agreement with Telia.<sup>141</sup> Nkom found that the wholesale market was characterised by high entry barriers in the form of very high roll-out costs, a high percentage of sunk costs and substantial economies of scale for the established operators. It held that the market dynamics would be completely dependent on the access terms provided by the two established network owners during the period covered by the analysis, and that the market would not benefit from effective competition if regulation was removed. The need for rapid regulatory intervention *ex ante*, predictability for operators and comprehensive and detailed regulation, led Nkom to conclude that the application of *ex post* competition law alone was insufficient to achieve sustainable competition in the market.<sup>142</sup>

112. In Nkom's 2010 SMP Decision, obligations were imposed on Telenor, again on the basis of Nkom's defined regulatory principle 3 (see footnote 124 above), while still also recognising the value of stimulating competition in the short term.<sup>143</sup> These obligations related to access (obligation to meet all reasonable requests for NR, MVNO access and co-location),<sup>144</sup> non-discrimination, transparency (including publication of reference offers), and accounting separation between the retail and the wholesale operations.<sup>145</sup> The obligation to provide co-location at cost-oriented prices was maintained, but the price control in relation to NR was withdrawn.<sup>146</sup> Nkom also continued to refrain from imposing a price control on MVNO access.<sup>147</sup>

#### 5.2.4 The 2016 Market Analysis and SMP Decision

113. In July 2016, Nkom concluded a new market analysis of the market for access and call origination on public mobile telephone networks ("Nkom's 2016 SMP Decision"<sup>148</sup> and

<sup>140</sup> NR agreement dated 3 April 2008 (see Document No 657260 – EES 27).

<sup>141</sup> Wholesale agreement, signed by Tele2 on 11 May 2007 (see Document No 847815). On page 6/24, Tele2 is referred to as an MVNO.

<sup>142</sup> See Nkom's 2010 Market Analysis, page 5.

<sup>143</sup> See Nkom's 2010 SMP Decision, page 4.

<sup>144</sup> As in 2006, no obligations were imposed on Telenor to ensure access for SPs. Nkom noted in this respect that NwN had established itself as a new operator that offered SP agreements and that SPs therefore could choose between three providers of SP access (see Nkom's 2010 SMP Decision, paragraphs 151–152).

<sup>145</sup> The accounting separation obligation also covered NR access, in addition to MVNO access (see Nkom's 2010 SMP Decision, Section 7.4). Nkom's 2010 SMP Decision was appealed *inter alia* by Telenor, and pursuant to Telenor's appeal, Nkom issued an amendment to the original decision: for a summary of this, see Nkom's 2016 SMP Decision (for the full reference, see footnote 148), Sections 4, 7.4 and 8.4.

<sup>146</sup> See Nkom's 2010 SMP Decision, Sections 7.5.1 and 7.5.3.

<sup>147</sup> See Nkom's 2010 SMP Decision, Section 7.5.2.

<sup>148</sup> See Nkom's "Decision on designating undertakings with significant market power and imposing specific obligations in the market for access and call origination on public mobile telephone networks" of 1 July 2016 (see Document No 1075860 for the version in English and Document No 1075947 for the version in Norwegian).

“Nkom’s 2016 Market Analysis”<sup>149</sup>).<sup>150</sup> Nkom again found that this market fulfilled the three-criteria test and was therefore still susceptible to *ex ante* regulation. It concluded on the basis of the market analysis that Telenor still had SMP on this wholesale market and imposed a number of obligations on Telenor.<sup>151</sup>

114. Nkom defined the wholesale market as including wholesale access to all public GSM, UMTS and LTE networks, and origination of voice, text messaging and data services for all types of access seekers (NROs, MVNOs and SPs). This wholesale market included access to offer ordinary mobile communications services, access to offer stand-alone MBB<sup>152</sup> and access to offer M2M services.<sup>153</sup>
115. The geographical market was defined as Norway.<sup>154</sup>
116. At the retail level, Nkom found that, since its 2010 Market Analysis, Telenor had seen a small decline in (aggregate) market shares measured as the number of subscriptions, but in terms of revenue its market share had increased slightly. Telenor had around 52% of the number of subscriptions and 58% of the total revenue at the end of 2015.<sup>155</sup> Telia’s acquisition of Tele2 meant that the biggest challenger of the two established operators (Telenor and Telia) became part of Telia, and Telia had thereby increased its market share. Telia had 37% of the number of subscriptions and 33% of the total revenue at the

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<sup>149</sup> See Nkom’s “Analysis of the market for access and call origination on public mobile telephone networks” of 1 July 2016 (see Document No 1075327 for the version in English and Document No 1075948 for the version in Norwegian). This market analysis is annexed to Nkom’s 2016 SMP Decision as Annex 1.

<sup>150</sup> For the sake of completeness, the Authority notes that Nkom’s most recent market analysis relating to this wholesale market was concluded on 14 May 2020; see Nkom’s “Analysis of the market for access and call origination on public mobile telephone networks” of 14 May 2020 (“Nkom’s 2020 Market Analysis”) and Nkom’s “Decision on designating undertakings with significant market power and imposing specific obligations in the market for access and call origination on public mobile telephone networks” of 14 May 2020 (“Nkom’s 2020 SMP Decision”); available at: [https://www.nkom.no/english/market-regulation#market\\_15\\_access\\_and\\_call\\_origination\\_in\\_mobile\\_networks](https://www.nkom.no/english/market-regulation#market_15_access_and_call_origination_in_mobile_networks)), accessed June 2020. However, this market analysis is not relevant for the Period under Consideration in this case.

<sup>151</sup> For the sake of completeness, the Authority notes that Nkom’s 2020 Market Analysis and 2020 SMP Decision still found Telenor to have SMP on a forward-looking basis.

<sup>152</sup> Nkom found again that, contrary to the retail level, where internet access via mobile networks was also offered as stand-alone (dedicated) MBB subscriptions, independently of voice and text messaging, MBB products were not offered as a separate product at the wholesale level. At the wholesale level, the input factors used to offer data traffic in ordinary mobile subscriptions are the same as those used to offer stand-alone MBB subscriptions and the access price for mobile data traffic is not related to how the product is offered at the retail market. (See Nkom’s 2016 Market Analysis, paragraph 138.)

<sup>153</sup> Nkom’s 2016 Market Analysis defined five relevant retail markets as follows: 1) the residential market for bundled mobile telephony services; 2) the business market for bundled mobile telephony services; 3) the residential market for dedicated (i.e. stand-alone) MBB services; 4) the business market for dedicated (i.e. stand-alone) MBB services; and 5) the market for M2M communications services; see Nkom’s 2016 Market Analysis, Section 2. The same relevant retail markets were also identified in Nkom’s 2020 Market Analysis.

<sup>154</sup> See Nkom’s 2016 Market Analysis, Section 2.5.

<sup>155</sup> See Nkom’s 2016 Market Analysis, pages 2–3.

end of 2015. Overall, the two established operators controlled around 90% of the retail market.<sup>156</sup>

117. At the network level, Nkom concluded that there were only two operators.<sup>157</sup> After Telia's acquisition of Tele2, Telenor had a market share of 59% of the traffic minutes, while Telia's share was 41% (with similar mobile data market shares for each of the two operators).<sup>158</sup> In Nkom's view, the development of market shares, both at the retail and wholesale level, did not indicate that the market was tending towards sustainable competition. On the contrary, the market had become more concentrated since Nkom's 2010 Market Analysis.<sup>159</sup>
118. In Nkom's 2016 SMP Decision, Telenor was designated as an SMP operator. Nkom mainly based its choice of remedies on its regulatory principle 3 (see footnote 124 above) again, but with a somewhat greater emphasis on principle 2 (which supports service-based competition when duplication of infrastructure is not considered feasible) than in the previous market analyses.<sup>160</sup> This shift towards better facilitating service-based competition reflected Nkom's growing recognition of the importance of MVNOs and SPs in contributing to sustainable competition.<sup>161</sup> A general access obligation (not only including NRO and MVNO access and co-location, but this time also access for SPs<sup>162</sup>) was thus imposed on Telenor.<sup>163</sup> In the light of this access obligation, Nkom imposed obligations on Telenor in relation to non-discrimination, transparency (including publication of reference offers) and accounting separation between Telenor's network operations and its internal retail mobile operations in Norway.<sup>164</sup> In addition, Nkom imposed requirements for price controls for the regulated forms of access. In particular, it imposed full margin squeeze tests for NRO and MVNO access.<sup>165</sup> In the case of SP

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<sup>156</sup> See Nkom's 2016 Market Analysis, page 3.

<sup>157</sup> With regard to ICE, Nkom concluded that it did not have clear grounds to indicate that it would be able to discipline the established network providers in the relevant wholesale market within the analysis' time horizon; see Nkom's 2016 Market Analysis, page 3.

<sup>158</sup> See Nkom's 2016 Market Analysis, page 3.

<sup>159</sup> See Nkom's 2016 Market Analysis, page 3.

<sup>160</sup> See Nkom's 2016 SMP Decision, page 2 and Section 6.1.

<sup>161</sup> See Nkom's 2016 SMP Decision, page 2 and Section 7.1.4.

<sup>162</sup> As explained above, the access obligations imposed on Telenor in Nkom's 2006 and 2010 SMP Decisions did not cover access for SPs. Nkom's 2016 Market Analysis conducted an updated market analysis of the competitive conditions for SPs and concluded that there were no longer clear signs that competition in offering access to SPs functioned satisfactorily. The analysis showed *inter alia* that the number of SPs that were not owned by the two established MNOs (Telenor and Telia) had fallen since Nkom's 2010 Market Analysis. In addition, Nkom found that, at the time of its 2016 SMP Decision, no other operators than Telenor and Telia actually offered SP access and that terms and conditions had been included in SP agreements during the preceding regulatory period that were not consistent with well-functioning competition (see Section 7.1.4 of Nkom's 2016 SMP Decision).

<sup>163</sup> See Nkom's 2016 SMP Decision, Section 7.1.

<sup>164</sup> See Nkom's 2016 SMP Decision, Sections 7.2 – 7.4. The accounting separation obligation would continue to cover both NR and MVNO access.

<sup>165</sup> See Nkom's 2016 SMP Decision, Section 8.5.1. These margin squeeze tests are carried out a broader level of product/service aggregation than in the present case (see Section 10.3.5 below in this respect).

access, it imposed a gross margin test, requiring that all individual products offered by Telenor in the test should show positive gross margins.<sup>166</sup> Nkom's 2016 SMP Decision was upheld on appeal.<sup>167</sup>

119. Thus, Telenor's wholesale tariffs for MVNO and SP access were not subject to *ex ante* price controls at all from 2006 until 2016, and there were also no price controls in place for NR access between 2010 and 2016. Nkom only introduced comprehensive price control obligations (by way of defined margin squeeze tests for NR, MVNO and SP access) from 2016 onwards. This introduction of detailed price controls at each level of wholesale access in Nkom's 2016 SMP Decision, in contrast to the lighter approach taken in its 2006 and 2010 SMP Decisions, indicates that the market did not develop as anticipated in Nkom's previous market reviews.<sup>168</sup>

## II LEGAL AND ECONOMIC ASSESSMENT

### 6 ARTICLE 54 EEA

120. Article 54 EEA prohibits any abuse by one or more undertakings of a dominant position within the territory covered by the EEA Agreement or in a substantial part of it as incompatible with the functioning of the EEA Agreement in so far as it may affect trade between Contracting Parties.
121. Article 54 EEA is identical in substance to Article 102 of the Treaty on the Functioning of the European Union ("TFEU"). Pursuant to Article 6 EEA and Article 3(2) of the Surveillance and Court Agreement, the case law of the Court of Justice of the European Union ("CJEU") and of the General Court ("GCEU") is therefore relevant for the interpretation of Article 54 EEA.<sup>169</sup> In the same way as for Article 53 EEA, it is a fundamental objective of the EEA Agreement to ensure uniform interpretation and application of those provisions.<sup>170</sup>

<sup>166</sup> See Nkom's 2016 SMP Decision, Section 8.5.1, and Annex 2 to that Decision.

<sup>167</sup> See the appeal decision of the Norwegian Ministry of Transport and Communications: "Vedtak i klagesak om Nkoms vedtak om utpeking av tilbyder med sterk markedsstilling og pålegg om særskilte forpliktelser i markedet for tilgang til og satsaleoriginerering i offentlige mobilkommunikasjonsnett (tidligere Marked 15)" of 9 March 2018, available at: [https://www.regjeringen.no/contentassets/0c8cc18666a1468889983a5a5b8aa303/vedtak\\_klagesak\\_telenor\\_090318.pdf](https://www.regjeringen.no/contentassets/0c8cc18666a1468889983a5a5b8aa303/vedtak_klagesak_telenor_090318.pdf), accessed June 2020. The appeal decision made a number of specifications regarding the interpretation of the conditions for granting access.

<sup>168</sup> See also paragraph 596 below for an overview of Nkom's approach to *ex ante* price controls in the relevant wholesale market during the Period under Consideration.

<sup>169</sup> See judgment of 1 April 1998 in Case E-3/97 *Jan and Kristian Jæger AS* [1998] EFTA Ct. Rep. 1, paragraph 19; judgment of 22 March 2002 in Case E-8/00 *Landsorganisasjonen i Norge* [2002] EFTA Ct. Rep. 114, paragraph 39; judgment of 18 April 2012 in Case E-15/10 *Posten Norge* [2012] EFTA Ct. Rep. 246, paragraph 109; and judgment of 30 May 2018 in Case E-6/17 *Fjarškipti* [2018] EFTA Ct. Rep. 78, paragraph 28.

<sup>170</sup> Judgment of 22 March 2002 in Case E-8/00 *Landsorganisasjonen i Norge* [2002] EFTA Ct. Rep. 114, paragraph 39.

## 7 JURISDICTION

122. Pursuant to Article 56(2) EEA, the surveillance authority in whose territory a dominant position is found to exist is competent to examine an alleged abuse of a dominant position within the meaning of Article 54 EEA.
123. In this case, the dominant position at issue is on the wholesale market for access and origination services on public mobile telephony networks in Norway. Telenor's dominance on that market only covers the territory of Norway (see Section 9 below).
124. The Authority is therefore the competent surveillance authority within the meaning of Article 56(2) EEA for the application of Article 54 EEA in this case.

## 8 THE RELEVANT MARKETS

### 8.1 Introduction

#### 8.1.1 *General principles for market definition*

125. In defining the relevant markets in this case, the Authority has taken into consideration its Notice on the definition of the relevant market.<sup>171</sup> The definition of the relevant market serves as a tool to identify and define the boundaries of competition between firms.<sup>172</sup> It serves to establish the framework within which the competition rules are applied. According to this Notice, the main purpose of market definition is to identify in a systematic way the competitive constraints that the undertakings involved face. The objective of defining a market in both its product and geographic dimensions is to identify the (actual and potential) competitors of the undertakings involved that are capable of constraining those undertakings' behaviour and of preventing them from behaving independently of effective competitive pressure.<sup>173</sup>
126. The exercise of market definition consists in identifying the effective alternative sources of supply for the customers of the undertakings involved, both in terms of products/services and geographic location of suppliers.<sup>174</sup> A relevant product market comprises all those products and/or services which consumers regard as interchangeable or substitutable, by reason of the products' characteristics, their prices and their intended use.<sup>175</sup> A relevant geographic market comprises the area in which the undertakings

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<sup>171</sup> Decision of the EFTA Surveillance Authority No 46/98/COL of 4 March 1998 on the issuing of two notices in the field of competition on the definition of the relevant market for the purpose of competition law within the European Economic Area (EEA), and on agreements of minor importance which do not fall under Article 53(1) of the EEA Agreement, OJ L 200, 16.7.1998, p. 48 and EEA Supplement No 28, 16.7.1998, p. 3, Annex I ("Notice on the definition of the relevant market").

<sup>172</sup> Notice on the definition of the relevant market, paragraph 2. See also judgment of 25 March 2015, *Slovenská pošta*, T-556/08, EU:T:2015:189, paragraph 200, and judgment of 11 December 2003, *Adriatica di Navigazione*, T-61/99, EU:T:2003:335, paragraph 34.

<sup>173</sup> Notice on the definition of the relevant market, paragraph 2.

<sup>174</sup> Notice on the definition of the relevant market, paragraph 13.

<sup>175</sup> Notice on the definition of the relevant market, paragraph 7.

concerned are involved in the supply and demand of products or services, in which the conditions of competition are sufficiently homogeneous and which can be distinguished from neighbouring areas because the conditions of competition are appreciably different in those areas.<sup>176</sup>

127. The process of defining the relevant market often starts with identifying a candidate market. The candidate market comprises the product(s) or service(s) that is/are the focus of the investigation, i.e. the focal product(s). The purpose of starting the market definition process with this candidate market is to provide a framework for assessing the most immediate sources of competitive constraints on the focal product(s) under investigation.
128. Firms are subject to three main sources of competitive constraint: demand-side substitution, supply-side substitution and potential competition.<sup>177</sup> The Notice on the definition of the relevant market treats demand-side substitution as the starting point for the definition of the relevant product market. From an economic point of view, demand-side substitution constitutes the most immediate and effective disciplinary force on the suppliers of a given product, in particular in relation to their pricing decisions.<sup>178</sup> Demand-side substitution therefore has a prominent role when defining the relevant market. A firm or a group of firms cannot have a significant impact on the prevailing conditions of sale, such as prices, if customers are in a position to switch to readily available substitute products or to suppliers located elsewhere. Basically, the exercise of market definition consists in identifying the effective alternative sources of supply for the customers of the undertakings involved, both in terms of products/services and geographic location of suppliers.<sup>179</sup>
129. The assessment of demand-side substitution entails a determination of the range of products which are viewed as substitutes by consumers.<sup>180</sup> One way of determining this can be through a speculative experiment, in which a hypothetical small, lasting change in relative prices (a Small but Significant and Non-transitory Increase in Price – “SSNIP”) is postulated and the likely reactions of customers to that increase are evaluated.<sup>181</sup> However, the definition of the relevant market does not require the Authority to follow a rigid hierarchy of different sources of information or types of evidence. Rather, the Authority must make an overall assessment and can take account

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<sup>176</sup> Notice on the definition of the relevant market, paragraph 8.

<sup>177</sup> Notice on the definition of the relevant market, paragraph 13. Potential competition is not taken into account when defining markets; see Notice on the definition of the relevant market, paragraph 24.

<sup>178</sup> Notice on the definition of the relevant market, paragraph 13. See also, for example, judgment of 4 July 2006, *easyJet*, T-177/04, EU:T:2006:187, paragraph 99, and judgment of 29 March 2012, *Telefónica*, T-336/07, EU:T:2012:172, paragraph 113.

<sup>179</sup> Notice on the definition of the relevant market, paragraph 13.

<sup>180</sup> Notice on the definition of the relevant market, paragraph 15.

<sup>181</sup> Paragraph 15 of the Notice on the definition of the relevant market confirms that the SSNIP test is only one way to assess demand-side substitution: “*The assessment of demand substitution entails a determination of the range of products which are viewed as substitutes by the consumer. One way of determining this can be viewed as a speculative experiment, postulating a hypothetical small, lasting change in relative prices and evaluating the likely reactions of customers to that increase.*”

of a range of tools for the purposes of that assessment.<sup>182</sup> It is not mandatory to carry out a SSNIP test.<sup>183</sup>

130. In most cases, a decision will be based on the consideration of a number of criteria and different items of evidence.<sup>184</sup> Qualitative factors that affect demand-side substitution should also be taken into account and analysed. These factors include the natural characteristics of the products, the intended use and differences in price.<sup>185</sup>
131. Supply-side substitution may also be taken into account when defining markets, provided that its effects are equivalent to those of demand-side substitution in terms of effectiveness and immediacy. This means that, in response to small and permanent changes in relative prices, suppliers are able to switch production to the focal product(s) and market them in the short term without incurring significant additional costs or risks.<sup>186</sup>
132. These situations typically arise when companies market a wide range of qualities or grades of one product. In such cases, even if for a given final customer or group of consumers, the different qualities are not substitutable, the different qualities will be grouped into one product market, provided that most of the suppliers are able to offer and sell the various qualities immediately and without significant increases in costs. In such cases, the relevant product market will encompass all products that are substitutable in

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<sup>182</sup> See judgment of 14 December 2005, *General Electric*, T-210/01, EU:T:2005:456, paragraphs 518-519; and judgment of 9 March 2015, *Deutsche Börse*, T-175/12, EU:T:2015:148, paragraph 133. See also the Notice on the definition of the relevant market, paragraph 25.

<sup>183</sup> See judgment of 11 January 2017, *Topps Europe*, T-699/14, EU:T:2017:2, paragraph 82: “*In the present case, as regards, first of all, the applicant’s argument that the Commission ought to have carried out an SSNIP test, it must be found that although that type of economic test is indeed a recognised method for defining the market at issue, it is not the only method available to the Commission. It may also take into account other tools for the purposes of defining the relevant market, such as market studies or an assessment of consumers’ and other competitors’ points of view. The SSNIP test may also prove unsuitable in certain cases, for example in the presence of the ‘cellophane fallacy’, that is, the situation where the undertaking concerned already holds a virtual monopoly and the market prices are already at a supra-competitive level, or where there are free goods or goods the cost of which is not borne by those determining the demand. It is also apparent from point 25 of the Commission notice on the definition of relevant market for the purposes of Community competition law (OJ 1997 C 372, p. 5) that the definition of the relevant market does not require the Commission to follow a rigid hierarchy of different sources of information or types of evidence. The Commission did not, therefore, commit a manifest error of assessment in basing its conclusions on the relevant market on its assessment of the evidence gathered without having recourse to an SSNIP test.*” In paragraph 243 of its Decision of 27 June 2017 in Case AT.39740 – *Google Search (Shopping)* (“*Google Shopping Decision*”), the Commission relied on the *Topps Europe* judgment in support of its position that the SSNIP test is not the only method available to the Commission when defining the relevant market.

<sup>184</sup> Notice on the definition of the relevant market, paragraph 25.

<sup>185</sup> Notice on the definition of the relevant market, paragraph 7.

<sup>186</sup> Notice on the definition of the relevant market, paragraph 20. This speculative experiment concerns an assessment of the ease, cost and timeliness of switching production from an alternative product to the focal product, e.g. production lines that can be used for multiple products.

demand and supply, and the current sales of those products will be aggregated so as to give the total value or volume of the market.<sup>187</sup>

133. When supply-side substitution entails the need to adjust significantly existing tangible and intangible assets, additional investments, strategic decisions or time delays, it will not be considered at the stage of market definition.<sup>188</sup> In order to assess whether supply-side substitution exercises the same effective and immediate constraints as demand-side substitution, it is appropriate to take into account the *economic incentives* of the parties involved.<sup>189</sup>

### 8.1.2 Market definition and the relevance of sector-specific regulation

134. The Authority considers Nkom's market analyses as relevant background for defining the relevant markets in the present case. Nkom carries out its market definition assessment based on competition law principles.<sup>190</sup>
135. However, although NRAs and competition authorities, when examining the same issues in the same circumstances and with the same objectives should in principle reach the same conclusions, it cannot be excluded that markets defined for the purposes of competition law and markets defined for the purposes of sector-specific regulation may not always be identical.<sup>191</sup>
136. In this context, the Authority notes that Nkom's analyses are conducted in an *ex ante* (i.e. forward-looking) context, based on expectations regarding *future* market developments, whereas the Authority's competition (antitrust) investigations are largely carried out in an *ex post* context.<sup>192</sup> Given this difference in perspective, while Nkom's market analyses provide certain relevant findings and information that the Authority has taken into account in this Decision, the Authority has reached its own conclusions on the relevant markets. These conclusions also draw on the actual market developments and circumstances that prevailed during the Period under Consideration.

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<sup>187</sup> Notice on the definition of the relevant market, paragraph 21.

<sup>188</sup> Notice on the definition of the relevant market, paragraph 23.

<sup>189</sup> See Section 8.4.4.3.2 below.

<sup>190</sup> See Section 5.1 above.

<sup>191</sup> See also European Commission, "Explanatory Note, Accompanying document to the Commission Recommendation on Relevant Product and Service Markets within the electronic communications sector susceptible to *ex ante* regulation in accordance with Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communications networks and services", SEC(2007) ("Commission's 2007 Explanatory Note"), Section 2.1, page 6 (available at: <<https://ec.europa.eu/transparency/regdoc/rep/2/2007/EN/2-2007-1483-EN-2-1.PDF>>, accessed June 2020).

<sup>192</sup> For example, as explained below, in the present case the Authority will, among other things, examine whether MTDS (see paragraph 7 above) were in the same relevant market as residential stand-alone MBB services during the Period under Consideration, taking into account the *actual* market situation and circumstances. The Authority nevertheless notes that, for the assessment of the anti-competitive effects of the conduct under investigation in the present case, it is sufficient to demonstrate potential effects (see Section 10.5.1 below).

### 8.1.3 *The relevant markets in the present case*

137. The Authority has in the present case identified the following relevant markets:

- (a) at the *upstream* level, the wholesale market for access and origination services (for voice and data)<sup>193</sup> on public mobile telephone networks in Norway (see Sections 8.2 and 8.3 below); and,
- (b) at the *downstream* level, the retail market for the provision of stand-alone<sup>194</sup> MBB services to residential customers in Norway (see Sections 8.4 and 8.5 below).

## 8.2 **The relevant product market at the upstream level**

138. At the upstream or wholesale level, the primary purpose of the definition of the relevant market in this case is to provide a framework for the assessment of dominance at that level during the Period under Consideration. It enables the Authority to determine the main players, to assess matters such as their market shares, and to assess whether any of these players had market power.

139. As indicated in Section 4.2 above, access to a mobile network is a precondition for providers wishing to offer retail mobile communications services, such as stand-alone MBB services, to end users. Such wholesale access is considered in the present section.

140. The Authority has taken its 2004 Recommendation on relevant markets as a starting point for the definition of the relevant product market at the upstream (wholesale) level in this case, as this was the Recommendation in force at the beginning of the Period under Consideration. In its 2004 Recommendation on relevant markets, the Authority defined, in accordance with the principles of EEA competition law,<sup>195</sup> a wholesale market for access and call origination on public mobile telephone networks.<sup>196</sup>

### 8.2.1 *Inclusion of mobile data services*

141. In accordance with the Authority's 2004 Recommendation on relevant markets, Nkom's 2006 Market Analysis held that the relevant upstream market, i.e. the market for access and call origination on public mobile telephone networks in Norway included the following services:

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<sup>193</sup> This wholesale product market corresponds to Market 15 in the Authority's 2004 Recommendation on relevant markets (see Section 5.1 above). The relevant wholesale product or input can technically be used to provide mobile voice, SMS/MMS and mobile data services (such as MTDS and stand-alone MBB services) at the retail level. The retail service covered by the present margin squeeze investigation, however, only relates to residential stand-alone MBB and does not concern mobile voice calls or MTDS. In this Decision, to avoid confusion, the wholesale/upstream product or input for residential stand-alone MBB will also be referred to as "access and origination services on public mobile telephone networks" or "mobile access and origination services" (see also footnote 3 above). See Section 8.2.3 below for a complete description of the relevant wholesale market.

<sup>194</sup> See paragraph 7 above.

<sup>195</sup> See the 2004 Recommendation on relevant markets, recital 8.

<sup>196</sup> Also referred to as Market 15 as explained in Section 5 above. See also footnote 193 above.

- (a) access and call origination (outgoing voice telephony) on public GSM networks and 3G networks at the wholesale level;
  - (b) access by prepaid card/subscription and post-paid subscription;
  - (c) access for residential customers/households and business customers; and
  - (d) originated SMS messages.<sup>197</sup>
142. As noted in paragraph 136, when defining the relevant market at the upstream level in this case, the Authority is not bound by Nkom's market definition, which was based on expectations regarding future market developments (*ex ante* assessment). Taking the actual market circumstances into account (*ex post* assessment), the Authority has assessed whether, in this case, the relevant market as defined by Nkom, i.e. access and origination on public mobile telephone networks (thus including the services at points (a) to (d) in paragraph 141 above), should be narrowed or broadened for the purposes of these proceedings.
143. For the purpose of this case, the Authority concurs, for the main part, with Nkom's findings.
144. In particular, the Authority considers, in line with Nkom's findings, that the wholesale market for access and origination on public mobile telephone networks should not be further segmented according to the type of customers (prepaid and post-paid subscribers, residential and business customers) being addressed at the downstream level. It should thus include the services at points (b) and (c) in paragraph 141 above. The reason is that, at the upstream level, no differentiation in the wholesale access and origination input is made based on the type of downstream retail customers (e.g. pre- vs. post-paid customers; or, residential vs. business customers) being served.<sup>198</sup>
145. The Authority also considers that no further segmentation should be made according to the type of retail services intended to be delivered on the basis of this wholesale input. The relevant market should thus also include the services at points (a) and (d) in paragraph 141 above. The Authority agrees with Nkom that, in addition to access and call origination on a mobile network (point (a) above), originated SMS messages (point (d) above) should be part of the relevant market. This is because, at the upstream level, wholesale customers buy access and origination services for voice calls and SMS messages together (and, at the retail level, end users also buy SMS messages and voice telephony services "bundled" with access, via their subscription).<sup>199</sup>
146. During the course of these proceedings, Telenor has not disputed the inclusion of access and call origination on public mobile telephone networks, nor has it disputed the inclusion of access and origination for pre- and post-paid subscriptions, residential and business customers, and for SMS (points (a) to (d) above) in the relevant product market at the upstream level.

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<sup>197</sup> See Sections 2.3 and 2.4 of Nkom's 2006 Market Analysis.

<sup>198</sup> In 2010, Nkom came to the same conclusion. See Sections 2.3.4 and 2.3.5 of Nkom's 2010 Market Analysis.

<sup>199</sup> See Section 2.3.6 of Nkom's 2006 Market Analysis and Nkom's 2010 Market Analysis.

147. In 2006, Nkom opted for not including wholesale access for mobile data services in the relevant upstream market, because it considered that: the use of such services was limited; those services were in an early phase of development and therefore difficult to assess; and their inclusion would not affect the outcome of the actual market analysis.<sup>200</sup> The Authority considers however that, for the reasons set out in paragraphs 148 and 149 below, access for mobile data services (including MTDS and MBB, which are based on the same wholesale input) should also be included in the relevant product market at the upstream level for the *entire* Period under Consideration.<sup>201</sup>
148. The Authority notes that, during the Period under Consideration, the wholesale input for retail mobile data services was offered together (“bundled”) with the necessary wholesale input for other retail mobile communications services (i.e. voice and SMS).<sup>202</sup> Wholesale contracts did not typically distinguish between the different possible uses for the wholesale access and origination input in the downstream market.<sup>203</sup> In other words, during the Period under Consideration, the wholesale access and origination inputs necessary to deliver the different retail mobile communications services (mobile voice, SMS, MTDS and MBB) were sold and purchased as a bundle at the upstream level.<sup>204</sup> Nkom recognised this in 2010 (and 2016), when it included wholesale access for mobile data services in the relevant upstream market.<sup>205</sup>
149. During the course of these proceedings, Telenor has not disputed the inclusion of wholesale access for mobile data services in the relevant product market at the upstream level.

### 8.2.2 *No need to define separate markets by type of access seeker*

150. As set out in Section 4.2.1 above, the supply side of the wholesale market for access and origination services on public mobile telephone networks is represented by MNOs, which own their mobile networks.
151. On the demand side, operators that do not control all the infrastructure necessary to offer mobile communications services to end users buy access to one (or more) of the MNOs’ networks. The type of network access that a wholesale customer (access seeker) requires

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<sup>200</sup> See Section 2.3.8 of Nkom’s 2006 Market Analysis.

<sup>201</sup> Nkom included wholesale access for mobile data services in the relevant upstream market as from its 2010 SMP Decision, following its 2010 Market Analysis; see also paragraph 109 above.

<sup>202</sup> Telenor confirms the joint provision of inputs for mobile voice and data services, while noting that this has never been a requirement; see Reply to the SO, paragraph 288.

<sup>203</sup> See, for example, Document No 657260 for contracts signed by Telenor with some of its wholesale customers.

<sup>204</sup> As demonstrated in Section 8.4 below, at the downstream level, MBB was offered on a stand-alone basis to residential customers, outside the product bundle, which included ordinary mobile communication services.

<sup>205</sup> In 2010, when it included wholesale access for mobile data services in the relevant upstream market, Nkom noted that: (i) the use of data services through mobile internet access had grown rapidly; and (ii) bundling was done at the wholesale level, i.e. the access agreements for SPs, MVNOs and NROs covered purchase of originating voice, SMS and mobile data services. It further added that, in contrast to the retail level, MBB products were not offered as a stand-alone product at the wholesale level. See Section 2.3.7 of Nkom’s 2010 Market Analysis and Section 2.4.2 of Nkom’s 2016 Market Analysis.

will generally depend on the extent of its own infrastructure. During the Period under Consideration in Norway, on the demand side, there were three types of access seeker (see also Section 4.2.2 above): NROs, MVNOs and SPs.

152. In its market analyses, Nkom has so far consistently found it unnecessary to define a separate relevant product market at the upstream level for a specific type of access.<sup>206</sup>
153. In the present case, however, Telenor submits that there should be at least a separate market for the wholesale supply of mobile access and origination services to SPs.<sup>207</sup>
154. In Telenor's view, this is necessary because mobile access and origination services provided to SPs differ from those provided to NROs and MVNOs in terms of product characteristics, intended use and prices.<sup>208</sup> Further, according to Telenor, an SP will have a broader set of wholesale supply options than an NRO or an MVNO, as it can be supplied by an MNO, NRO, MVNO, or another SP. Finally, Telenor notes that there were differences in the regulatory framework during the Period under Consideration, notably because Nkom imposed an obligation on Telenor to supply access to NROs and MVNOs, but no obligation was imposed on it for the supply of access to SPs.<sup>209</sup>
155. The Authority disagrees with Telenor on this point. In particular, as shown in paragraphs 158–160 below, in this case, supply-side substitutability allows the Authority to conclude that there is no need to define a separate wholesale market for the supply of mobile access and origination services to SPs during the Period under Consideration.
156. From a demand-side perspective, as Telenor notes,<sup>210</sup> wholesale customers have different needs in terms of access to infrastructure and that, as a result, they require different access products, entailing different technical solutions and prices. This would be the case, for example, for MVNOs (which have their own core network and control interconnection

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<sup>206</sup> See Section 2.3.1 of Nkom's 2006 Market Analysis; Sections 2.3.1 and 2.5 of Nkom's 2010 Market Analysis, Section 2.4.1 of Nkom's 2016 Market Analysis and Section 2.6 of Nkom's 2020 Market Analysis.

<sup>207</sup> See Reply to the SO, Section 3.3. See also Reply to SSO, paragraph 62.

<sup>208</sup> In brief, in its Reply to the SO (see paragraph 78), Telenor argues that SPs do not operate a network of their own, but are simply resellers of a "white-labelled" service. As such, SPs operate at a functional level that is downstream of both NROs and MVNOs. In addition, contrary to NROs and MVNOs, SPs rely on the provider of mobile access and call origination for interconnection (termination of calls/SMS) with other national or international networks and for international roaming agreements. According to Telenor, because of these differences, NROs and MVNOs typically only pay three types of charges to access suppliers (namely, those relating to the number of active SIMs, charges per minute/per SMS for originating and terminating call minutes/SMS and charges per MB of data). Telenor argues that, in contrast, prices charged to SPs reflect the broader set of services they receive, including SIM cards, termination on other Norwegian networks, international roaming, voicemail and content management.

<sup>209</sup> For the sake of completeness, the Authority notes that, in 2016, Nkom decided to regulate the supply of access to SPs by Telenor, on the basis of a lack of clear signs that competition in offering access to SPs was functioning satisfactorily. See Section 7.1.4 of Nkom's 2016 SMP Decision. See also footnote 162 above.

<sup>210</sup> See Reply to the SO, paragraph 74, in which Telenor refers to the *Telefónica* case (Commission Decision of 4 July 2007 in Case COMP/38.784 – *Wanadoo España v Telefónica* ("Telefónica Decision")). In that case, the Commission made a distinction between national and regional wholesale markets (networks), given the significant costs for alternative operators (wholesale customers) of switching from one wholesale product to the other.

with other providers of fixed and mobile communications services), compared to SPs (which, on the contrary, do not have any own infrastructure and have to rely on one or more wholesale access providers for all of their infrastructure and service delivery needs).<sup>211</sup>

157. The Authority therefore recognises that the different types of access are not perfect demand-side substitutes for each other. This said, however, it is worth recalling, as recorded by Nkom, that some access buyers (such as Tele2, Ventelo and TDC) have moved between the different forms of access, which shows that demand-side substitution is indeed a possibility for certain providers.<sup>212</sup>
158. However, even if one assumes limited demand-side substitutability between the different forms of access in this case, there was sufficiently immediate and effective supply-side substitution by suppliers of wholesale mobile access and origination services to NROs and MVNOs. While the degree of network autonomy may play a role, the two suppliers of wholesale access with nationwide coverage in Norway (Telenor and Telia) had access to the required network infrastructure (including base stations, masts, switches and frequencies) and provided all types of wholesale access during the Period under Consideration.<sup>213</sup> Switching from supplying access to one type of wholesale customer (say, MVNOs or NROs) to another (say, SPs) was technically feasible and involved limited additional costs and risks during the Period under Consideration. There was, therefore, sufficiently immediate and effective supply-side substitutability in the supply of wholesale access and origination services to different access buyers during the Period under Consideration. Consequently, due to supply-side substitution, all types of access (i.e. access to NROs, MVNOs and SPs) belonged to the same relevant wholesale market.
159. Telenor in fact agrees with this, at least in part:<sup>214</sup> “*Telenor does recognize that there is easy supply side substitutability for firms supplying MVNOs to also supply SPs and that this would tend to favor the delineation of a combined wholesale market, [...]*”. It adds that this is not the case in the other direction (from supplying SPs to supplying

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<sup>211</sup> See paragraphs 83 and 87 above.

<sup>212</sup> For example, Tele2 passed from an SP agreement via an MVNO agreement to an NR agreement, while TDC and Ventelo transitioned from an SP agreement to an MVNO agreement. See the Norwegian NCA’s Merger Decision V2015-1, footnote 94. Nkom’s 2006 Market Analysis also found that providers such as Tele2, TDC and Ventelo moved between the different forms of access, which indicates, according to Nkom, that there are substitution possibilities, see paragraph 94. See also Nkom’s 2016 Market Analysis, paragraph 132.

<sup>213</sup> As indicated in Section 4.2.2 above, during the Period under Consideration, Telenor had an NRO agreement with NwN (Document No 657260 – EES 27), an MVNO agreement with *inter alia* Ventelo (Document No 657260 – EES 39) and TDC (Document No 657260 – EES 53) and an SP agreement with *inter alia* Hello (see (Document No 690710, Annex 7 – prices applicable from 01/06/2012). Telia had an NRO agreement with NwN until the end of March 2008, when the latter switched to Telenor (see Document No 847814), an MVNO agreement with *inter alia* Lycamobile Norway (see Document No 847807) and an SP agreement with Altibox (see Document No 847821), among others.

<sup>214</sup> See Document No 819874, Telenor’s letter to the Authority of 23 September 2016, page 2.

MVNOs).<sup>215</sup> This substitution in the other direction is, however, not the relevant supply-side substitutability question in the present case, as Telenor itself admits.<sup>216</sup>

160. Telia, also speaking on behalf of Tele2 and NwN as their successor, agrees that it is correct, on the basis of supply-side substitution, not to make a distinction between SP access and NRO/MVNO access.<sup>217</sup>
161. The Authority therefore concludes that, in this case, the relevant product market at the upstream level, i.e. the supply of wholesale access and origination services on public mobile telephone networks, includes all forms of access (i.e. for NROs, MVNOs and SPs).
162. This conclusion is further corroborated by Nkom's consistent findings in its market analyses,<sup>218</sup> the European Commission's decisional practice in merger cases,<sup>219</sup> the

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<sup>215</sup> See Document No 819874, Telenor's letter to the Authority of 23 September 2016, page 3: "It might be useful in this context to note that while supply side substitutability from supplying MVNOs to supplying SPs is straightforward for all players, it is not straightforward for all players to substitute in the other direction: from supply to SPs to supply to MVNOs. This is because many players that supply SPs (e.g. other SPs and other MVNOs) are not MNOs and would not be able to supply MVNO".

<sup>216</sup> See Document No 819874, Telenor's letter to the Authority of 23 September 2016, page 3: "Although the relevant supply side substitutability question here is whether there is supply side substitutability from supplying MVNOs to supplying SPs, the fact that supply side substitutability is not straightforward in the other direction highlights why there may be greater competition in supply to SPs and why the question of whether Telenor is dominant in the supply to SPs should be examined separately."

<sup>217</sup> See Telia's letter to the Authority of 30 August 2016, Document No 1075917, Section 2.1.

<sup>218</sup> For example, while in its 2016 Market Analysis, Nkom acknowledged that the different types of access were not good demand-side substitutes for one another (see paragraph 130), Nkom nevertheless retained a single market for the supply of access and (call) origination services, without distinction by type of access seeker. This was because Nkom relied on supply-side substitution and noted that, among other things, the production of the services offered at the retail level requires the same input factors (see paragraph 131). For the 2006, 2010 and 2020 market analyses, see paragraph 152 above.

<sup>219</sup> See, in particular, the Commission's Decisions in cases M.7758 – *Hutchison 3G Italy/Wind/JV*, Section 6.3.1, and M.7612 – *Hutchison 3G UK/Telefónica UK*, Section 7.3.1. See also the Commission's Decisions in cases M.8131 – *Tele2 Sverige/TDC Sverige*, Section 4.11.1, M.7637 – *Liberty Global/BASE Belgium*, Section 4.6.1, M.7018 – *Telefónica Deutschland/E-Plus*, Section 5.2, M.6992 – *Hutchison 3G UK/Telefónica Ireland*, Section 6.1.2, M.6497 – *Hutchison 3G Austria/Orange Austria*, Section 5.2.2, M.5650 – *T-Mobile/Orange*, paragraphs 27–30, and M.4947 – *Vodafone/Tele2Italy/Tele2 Spain*, paragraph 15.

Norwegian NCA's decisional practice<sup>220</sup> and the Authority's 2004 Recommendation on relevant markets.<sup>221</sup>

163. The Authority's conclusion is unchanged by the fact that the supply of mobile access and origination services to SPs was not regulated during the Period under Consideration. While Nkom did not regulate access for SPs in its 2006 and 2010 SMP Decisions,<sup>222</sup> it nonetheless consistently considered access to SPs to be part of a single wholesale market, including access to all types of access seekers (i.e. NROs and MVNOs in addition to SPs). Hence, as far as the type of access seeker is concerned, the Authority's approach to the upstream market definition is fully aligned with that of Nkom (across all of its market analyses).

### **8.2.3 Conclusion on the relevant product market at the upstream level**

164. On the basis of the above, the Authority concludes that, for the Period under Consideration, the relevant product market at the upstream level is the wholesale market for access and origination services on public mobile telephone networks.
165. For the purposes of this Decision, this market includes, for the Period under Consideration, the following services provided across all forms of wholesale access, i.e. access for NROs, MVNOs and SPs:
- access and origination services for voice calls, SMS (text messaging), MMS, and data services (including MTDS and MBB), for residential (non-business) and business customers, whether pre- or post-paid customers, on all public mobile networks (i.e. GSM networks and 3G (UMTS) and 4G (LTE) networks).

### **8.3 The relevant geographic market at the upstream level**

166. According to established case law, the relevant geographic market comprises an area in which the undertakings concerned are involved in the supply and demand of the relevant products or services, in which area the conditions of competition are similar or sufficiently homogeneous and which can be distinguished from neighbouring areas in which the prevailing conditions of competition are appreciably different.<sup>223</sup> The

<sup>220</sup> See Vedtak V2018-20 – Telenor Norge AS og Telenor ASA – konkurranse-loven § 29, jf. § 11 og EØS-avtalen artikkel 54, 21 June 2018 ("the Norwegian NCA's Decision V2018-20"), paragraph 387; see Document No 1075916 (public version). This Decision was upheld by the Norwegian Competition Tribunal (Konkurranseklagenemnda) on 19 June 2019 (see: Konkurranseklagenemnda avgjørelse V03/2019 19. juni 2019 in Case 2019/34; "Norwegian Competition Tribunal's Decision V03/2019"), Section 6.2. An appeal against the latter decision is currently pending. See also the Norwegian NCA's Merger Decision V2015-1, paragraphs 156–160, where the Norwegian NCA insisted on supply-side substitution at wholesale level and retained for this reason a global market including all types of access, although it noted that it was not necessary to take a final decision on this issue as it was not crucial for its conclusion in that case.

<sup>221</sup> See Market 15 of the 2004 Recommendation on relevant markets, read in conjunction with the Commission's 2003 Explanatory Memorandum, page 30, where it states: "The relevant wholesale market appears in general to be access and call origination on mobile networks".

<sup>222</sup> See paragraph 102 and footnote 144 above, as well as the discussion in Section 9.2.6.6 below.

<sup>223</sup> Judgment of 14 February 1978, *United Brands*, 27/76, EU:C:1978:22, paragraph 44; judgment of 9 November 1983, *Michelin I*, 322/81, EU:C:1983:313, paragraph 26, and judgment of 5 October 1988, *Alsatel v Novasam*,

definition of the geographic market does not require the conditions of competition between traders or providers of services to be perfectly homogeneous. It is sufficient that they are similar or sufficiently homogeneous and, accordingly, only those areas in which the conditions of competition are 'heterogeneous' may be considered not to constitute a uniform market.<sup>224</sup>

167. In the electronic communications sector, the geographic scope of the relevant market has traditionally been determined by reference to two main criteria, namely the area covered by the network and the existence (and boundaries) of legal and other regulatory instruments (including spectrum licensing).<sup>225</sup>
168. The wholesale provision of mobile services in Norway has generally corresponded to national borders during the Period under Consideration.<sup>226</sup> Since the network coverage of the two main wholesale suppliers, Telenor and Telia, has been national in scope, the supply of access and origination services on public mobile telephone networks has also been national in scope. In addition, Nkom's regulatory jurisdiction covers only the territory of Norway<sup>227</sup> and therefore the regulatory regime is distinct from the one covering neighbouring countries. The fact that mobile operators can provide services only in the areas in which they have been authorised, and that a network architecture reflects the geographical dimension of the mobile licences, also explains why mobile markets are considered to be national in scope.<sup>228</sup>
169. The conditions of competition at the upstream level are homogenous in Norway, as illustrated by wholesale contracts that do not distinguish between different geographical areas in Norway.<sup>229</sup> At the same time, the conditions of competition differ significantly from the conditions of competition in other countries, largely due to different regulatory regimes.

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247/86, EU:C:1988:469, paragraph 15. See also the Notice on the definition of the relevant market, paragraph 8, and the Authority's SMP Guidelines, paragraph 57.

<sup>224</sup> See for example, judgment of 21 October 1997, *Deutsche Bahn*, T-229/94, EU:T:1997:155, paragraph 92, and judgment of 22 November 2001, *AAMS*, T-139/98, EU:T:2001:272, paragraph 39.

<sup>225</sup> See, for instance: *Telefónica* Decision, paragraph 211. See also the Commission's Decisions in cases M.7758 – *Hutchison 3G Italy/Wind/JV*, Section 6.3.2.2; M.7612 – *Hutchison 3G UK/Telefónica UK*, Section 7.3.2.2; M.7018 – *Telefónica Deutschland/E-Plus*, Section 5.2.2.2; M.6992 – *Hutchison 3G UK/Telefónica Ireland*, Section 6.2.2; M.6497 – *Hutchison 3G Austria/Orange Austria*, Section 5.3.2; M.5650 – *T-Mobile/Orange*, paragraph 31; M.4947 – *Vodafone/Tele2 Italy/Tele2 Spain*, paragraph 16; IV/M.1025 – *Mannesmann/Olivetti/Infostrada*, paragraphs 17–18 and COMP/JV.23 – *Telefónica Portugal Telecom/Médi Telecom*, paragraphs 18–19. See also the Authority's SMP Guidelines, paragraph 60.

<sup>226</sup> See, for instance, Telenor's NRO agreement with NwN (Document No 657260 – EES 27), as well as Telia's MVNO agreement with Lycamobile Norway (Document No 847807) and Telia's SP agreements with Altibox (Document No 847821) and Ventelo (Document No 847819).

<sup>227</sup> For example, Nkom's SMP decisions only relate to its jurisdiction, i.e. Norway.

<sup>228</sup> See the Authority's SMP Guidelines, footnote 45.

<sup>229</sup> See the examples in footnotes 203 and 213.

170. In light of the above, the Authority concludes that the market for wholesale access and origination services on public mobile networks was national in scope (i.e. corresponded to the territory of Norway) during the Period under Consideration.
171. Nkom reached the same conclusion in its market analyses of 2006, 2010, 2016 and 2020.<sup>230</sup> Telenor has not disputed this conclusion during the proceedings.<sup>231</sup>

#### **8.4 The relevant product market at the downstream level**

##### **8.4.1 Introduction**

172. As described in Section 8.1.1, the process of defining the relevant market often starts with identifying a candidate market. In the present case, the process of defining the relevant retail market therefore starts with residential stand-alone MBB as, following the inspections, this is the focal product in these proceedings. The market definition exercise then seeks to establish any effective sources of competitive constraint on that focal product. If, for example, fixed broadband services (“FBB”), MTDS, or MBB for business customers, were sufficiently close substitutes for the focal product during the Period under Consideration, then the candidate market should be broadened to include those other products. In identifying the most immediate competitive constraints on the focal product, the market definition is thus a key step in establishing the relevant framework for the subsequent competition analysis.
173. At the downstream or retail level, the primary purpose of defining the relevant market in this case is to provide a framework for assessing whether Telenor’s pricing behaviour constituted an abuse of a dominant position during the Period under Consideration, including the determination of which products to include in the margin squeeze test (see Section 10.3.5 below). As explained in Section 8.1.1 above, demand-side substitution is the starting point for the definition of the relevant product market. Demand-side substitution constitutes the most immediate and effective disciplinary force on the suppliers of a given product. As regards supply-side substitution, this should, as explained in Section 8.1.1, only be taken into account if its effects are equivalent to those of demand-side substitution in terms of effectiveness and immediacy.
174. For the reasons described below, the Authority has reached the conclusion that, for the Period under Consideration, the provision of stand-alone MBB services to residential customers is the relevant product market at the downstream level in this case.
175. The Authority’s analysis proceeds as follows:
- (a) Section 8.4.2 summarises, by way of introduction, the evolution of MBB in Norway from its launch in 2005 to 2014;

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<sup>230</sup> See Section 3 of Nkom’s 2006 Market Analysis; Section 2.4 of Nkom’s 2010 Market Analysis; Section 2.5 of Nkom’s 2016 Market Analysis; and Section 2.5 of Nkom’s 2020 Market Analysis.

<sup>231</sup> See, for example, paragraph 67 of the Reply to the SO.

- (b) Section 8.4.3 considers whether FBB (including private Wi-Fi and public Wi-Fi (including semi-public Wi-Fi)) was part of the same relevant market as residential stand-alone MBB services during the Period under Consideration;
- (c) Section 8.4.4 considers whether MTDS were part of the same relevant market as residential stand-alone MBB services during the Period under Consideration;
- (d) Section 8.4.5 examines the cumulative competitive constraint exerted by FBB (including private Wi-Fi and public Wi-Fi (including semi-public Wi-Fi)) and MTDS on residential stand-alone MBB services during the Period under Consideration;
- (e) Section 8.4.6 examines whether the market for the supply of stand-alone MBB services to residential customers should be broadened to include business customers in the same relevant market; and
- (f) Section 8.4.7 concludes on the relevant product market at the downstream level during the Period under Consideration.

#### **8.4.2 The evolution of MBB services in Norway from 2005 to 2014**

- 176. The present section describes the evolution of MBB services in Norway from their launch until 2014, i.e. two years after the Period under Consideration.
- 177. MBB services were introduced in Norway in 2005 by Telia.<sup>232</sup>
- 178. Telenor launched its first MBB price plans in 2006, and its first stand-alone MBB plans were launched the following year.<sup>233</sup>

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<sup>232</sup> See Telia's press release of 28 February 2005: "*NetCom launches the most comprehensive 3G network in Norway*" (available at: <https://www.teliacompany.com/en/news/press-releases/2005/2/netcom-launches-the-most-comprehensive-3g-network-in-norway/>), accessed June 2020; see Document No 1075347). See also Telia's reply of 14 March 2017 to the Authority's request for information of 13 February 2017, response to Question 2.6 (Document No 847237).

<sup>233</sup> See *inter alia* Reply to the SSO, paragraph 76; and Reply to the SO, paragraph 47. See also Telenor's press release of 15 June 2007: "*Telenor lanserer en ny mobil bredbåndløsning med billig bruk i hele sommer*" (available at: <https://www.telenor.com/no/media/pressemeldinger/telenor-lanserer-en-ny-mobil-bredbandlosning-med-billig-bruk-i-hele-sommer/>), accessed June 2020; translation by the Authority: "*Telenor launches a new mobile broadband solution with cheap usage all summer long*".

179. In an internal presentation of 8 April 2008 entitled “*Mobile BB KTT*”<sup>234</sup> regarding consumer surveys in the residential<sup>235</sup> MBB<sup>236</sup> market, Telenor stated the following regarding the importance of MBB services in general:<sup>237</sup>

“*Mobile broadband is a focus area in Telenor Mobile.*

- *Mobile broadband is one of the Must Win Battles for Telenor in 2008:*
  - #5: *Coverage: Mobile broadband with operators like Netcom and Ice means that Telenor must fight hard in order to maintain its position in respect of coverage.*
- *Concrete goals:*
  - *Subscription: Aim of 62 500 subscriptions EOY 2008 only in Consumer.*
  - *Market share target: 55%.*
  - *Recognition: That Telenor offers Mobile Broadband at 45%.”*

180. Telenor quickly acquired the largest market share in the residential MBB market. In 2008, Telenor’s market share was already 52.4% based on subscribers and 50% based on

<sup>234</sup> Translation by the Authority of: “*Mobilitt BB KTT*”. KTT stands for “*Kundetilfredshetsindeks*” or “*Customer Satisfaction Index*”.

<sup>235</sup> The Authority notes that the documents submitted by Telenor in its reply of 15 November 2019 (Document No 1097450) to the Authority’s request for information of 7 November 2019 concerned: “*documents listed under the headings ‘(i) External market research / surveys consumers segment’ and ‘(ii) Internal market research / surveys consumer segment’*” in Telenor’s reply of 18 November 2013 (Question 3.6). “Consumer segment” is ordinarily used as referring to residential customers. Therefore, in the absence of anything specific in a document which mentions business customers, the Authority assumes that all the data/information relates to residential MBB customers. Telenor claims that some of the surveys also deal with the business segment, and therefore, where relevant, the Authority has in the following sections undertaken an explicit assessment of the relevance of these surveys.

<sup>236</sup> The Authority acknowledges that, as indicated in Telenor’s letter of 10 December 2019, Section 2 (see Document No 1103119), the definition of MBB used in the surveys submitted by Telenor in its reply of 15 November 2019 to the Authority’s request for information of 7 November 2019 may have been broader than the “stand-alone MBB” definition used by the Authority. Telenor notes in this respect that the definition used in the surveys may include MBB tariff plans taken as add-ons to a mobile telephony subscription (see the discussion at paragraphs 327–331 below) and dual/twin SIM cards (i.e. additional data-only SIM cards added to an existing mobile telephony subscription (see paragraph 295 below)). However, given that the majority of residential customers consumed MBB priced on a stand-alone basis and not as part of a packaged or bundled price during the Period under Consideration (see, for example, the graph at paragraph 331 below), the Authority considers that the survey evidence provides a robust insight into how stand-alone MBB was being consumed by residential customers at that time.

<sup>237</sup> See Document No 1097593; see Telenor’s reply of 15 November 2019 (Document No 1097450) to the Authority’s request for information of 7 November 2019, page 2; Translation by the Authority of the following extract: “*Mobilitt bredbånd er et fokusområde i Telenor Mobil. Mobilitt bredbånd er et av Must Win Battles for Telenor i 2008: #5: Dekning: Mobilitt bredbånd med aktører som Netcom og Ice gjør at Telenor må kjempe hardt for å beholde dekningsposisjonen. Konkrete måltall: Abonnement: Målsetting om 62 500 abonnement EOY 2008 bare i Consumer. Markedsandelsmål: 55%. Kjennskap: Til at Telenor tilbyr Mobilitt Bredbånd på 45%*”. In an internal memorandum of October 2010 (see Document No 656746 – JN1 31, page 4/8), Telenor described the MBB market as displaying “significant growth” and it considered potential entry from a newcomer (Hi3G) targeting this (at the time) underdeveloped MBB market as the “main area for new establishment in Norway”.

revenues.<sup>238</sup> As can be seen from Table 10 at paragraph 645 below, it maintained market shares in that order during the entire Period under Consideration.

181. During the Period under Consideration, Telenor's market share was far higher than the shares held by the two other MNOs in Norway, namely Telia and ICE.<sup>239</sup> Telia had a market share of between 24% and 36% based on subscribers and between 15% and 32% based on revenues. ICE had a market share of between 11% and 20% based on subscribers and between 11% and 34% based on revenues.<sup>240</sup>
182. Non-MNOs also supplied residential MBB services but, in aggregate, their market shares remained limited and did not exceed 5.5% during the entire Period under Consideration.<sup>241</sup>
183. Table 2 below provides statistics in relation to stand-alone MBB subscriptions (combining both residential and business customers) in Norway between 2008 and 2014.

**Table 2: Number of subscribers and total revenues – MBB services (both residential and business customers), 2008–2014**

Variable	2008	2009	2010	2011	2012	2013	2014
Number of subscribers	264 698	430 644	505 785	566 527	571 434	555 475	535 015
Total revenues ('000 NOK)	495 703	801 273	897 190	1 017 158	1 159 803	1 187 518	1 257 410

Source: Nkom 2014 statistics on Norwegian e-com markets<sup>242</sup>

<sup>238</sup> See Table 10 at paragraph 645 below.

<sup>239</sup> ICE launched its own MBB services in 2006; see press release of 20 June 2006: "*Mobilt super-bredbånd til hele Norge*" (available at: <http://news.cision.com/no/ice-net/r/mobilt-super-bredband-til-hele-norge.c219058>), accessed June 2020); translation by the Authority: "*Mobile super-broadband for all of Norway*".

<sup>240</sup> See Table 10 at paragraph 645 below.

<sup>241</sup> See Table 10 at paragraph 645 below. Despite the presence of ICE and numerous MVNOs and SPs, Telenor labelled the MBB market, in an internal memorandum of October 2010, as a duopoly between itself and Telia; see Document No 656746 – JN1 31, page 4/8.

<sup>242</sup> See "Tallsammendrag for ekommerketet 2014" (translation by the Authority: "Figures summary for the ecom market 2014"), Tab 'Mobiltjenester' (translation by the Authority: "Mobile services"), Figure 22 and 32 (available at: <https://ekomstatistikken.nkom.no/#/download>), accessed June 2020.)

**Table 3: Total revenues ('000 NOK) – MBB services (both residential and business customers), 2008–2014**

Variable	2008	2009	2010	2011	2012	2013	2014
Residential	198 836	408 385	526 695	643 017	752 273	807 890	833 539
Business	296 867	392 888	370 495	347 141	407 530	379 628	423 871

Source: *Nkom 2014, statistics on Norwegian e-com market.*<sup>243</sup>

184. The total number of MBB subscribers in Norway increased from approximately 265 000 in 2008 to almost 431 000 in 2009 (an increase of 63%). Thereafter, growth slowed down, with the total number of subscribers peaking at around 571 500 in 2012. In 2013, the number of subscribers started to decline and amounted to approximately 535 000 in 2014 (down from around 555 500 in 2013). Total revenues, in contrast, increased each year (although the annual growth rate was higher in the early years) and amounted to approximately NOK 1.26 billion in 2014, up from approximately NOK 496 million in 2008.
185. As illustrated in Table 4 below, the largest proportion of Telenor’s customers in the MBB market during the Period under Consideration was above 30 years of age.

**Table 4: Customer demographics – Telenor MBB residential customers 2008–2011**<sup>244</sup>

	2008	2009	2010	2011
	% share	% share	% share	% share
<b>Gender</b>				
Men	77	69	58	62
Women	23	31	42	38
<b>Age</b>				
– 30 years	12	10	14	13
31–54 years	52	55	47	44
55 years +	35	35	39	43

<sup>243</sup> See “Tallsammendrag for ekommarkedet 2014”, Tab ‘Mobiltenester’, Figure 32 (available at: <<https://ekomstatistikken.nkom.no/#/download>>, accessed June 2020.)

<sup>244</sup> See “Usage Index Mobile Broadband” (translation by the Authority of: “Bruksindeks Mobil Bredbånd”); see Document No 1097608, page 72. The Authority notes that the interviews were being held between 30 September and 10 October 2011; see Document No 1097608, page 6.

186. In terms of data traffic volumes, as shown in Table 5 and Figure 2 below, MBB services grew very rapidly from 2008 to 2009 (an increase of 145%) and then at a more moderate – but still sustained – pace from 2010 to 2014, when annual growth rates ranged between 26% and 38%.

**Table 5 : Data traffic volumes (in petabytes) – MBB and MTDS, 2008–2014**

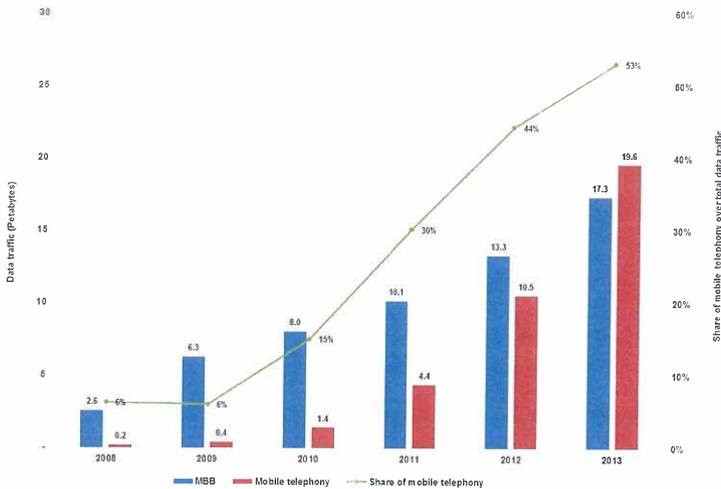
Variable	2008	2009	2010	2011	2012	2013	2014
MBB	2.55	6.25	8.01	10.12	13.28	17.33	23.90
MTDS	0.17	0.40	1.41	4.36	10.52	19.55	39.73
TOTAL	2.72	6.65	9.43	14.49	23.80	36.88	63.63
Share of MTDS out of total	6%	6%	15%	30%	44%	53%	62%

*Source: Nkom, The Norwegian e-com market, 2015.<sup>245</sup>*

187. Table 5 above and Figure 2 below show that the consumption of MTDS was minimal between 2008 and 2010 and still lagged considerably behind consumption of MBB data until 2012. It is only as from 2013 that the data traffic volumes for MTDS were higher than those for MBB, mainly due to increased smartphone penetration.<sup>246</sup>

<sup>245</sup> See page 35 of Nkom's report regarding the Norwegian e-com market 2015 and underlying data, "Tallsammendrag for ekomarkedet 2015" (translation by the Authority: "Figures summary for the ecom market 2015"), Tab 'Mobiltelefoner' (translation by the Authority: "Mobile telephony"), Figure 28, both available at: <<https://ekomstatistikken.nkom.no/#/download>>, accessed June 2020.

<sup>246</sup> See Nkom's 2016 Market Analysis, paragraphs 158–159, where the development in data traffic in the period 2008 to 2015 is discussed.

Figure 2: Data traffic volumes (in petabytes) – MBB and MTDS,<sup>247</sup> 2008–2013

Source: Nkom, *The Norwegian e-com market, 2015*.<sup>248</sup>

188. The rapid increase in the demand for mobile data (MBB and MTDS) presented capacity challenges for mobile communications providers, and in 2009 Telenor’s investment plans for its network had to be radically altered.<sup>249</sup> Telenor was determined that it should be able to maintain its “price-premium” position also in the future, meaning that it could charge higher prices than its competitors because of its superior network coverage and “best in test” experience. In order to do so, it considered that it had, among other things, to continue to develop its network coverage and speed.<sup>250</sup>
189. Despite the growth of mobile data consumption in Norway, mobile data usage rates in Norway during the Period under Consideration were nevertheless well below those in neighbouring countries Sweden, Finland and Denmark, as shown in Figure 3 below.

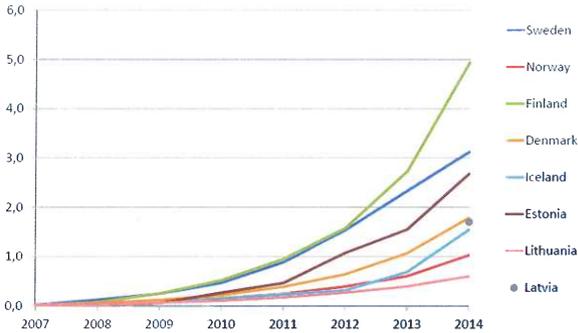
<sup>247</sup> Referred to as “Mobile telephony” in Figure 2.

<sup>248</sup> See page 35 of Nkom’s report regarding the Norwegian e-com market 2015 and underlying data, “Tallsammendrag for ekommarkedet 2015”, ‘Mobiltelefoni’, Figure 28, both available at: <<https://ekomstatistikken.nkom.no/#/download>>, accessed June 2020.

<sup>249</sup> See Document No 658730 – RWI 46, internal Telenor memorandum of 12 June 2009, page 3.

<sup>250</sup> See Document No 658730 – RWI 46, internal Telenor memorandum of 12 June 2009, pages 3–7.

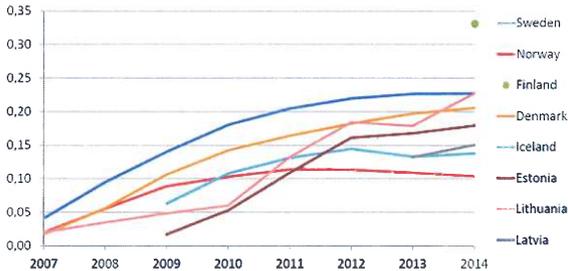
**Figure 3: Mobile data consumption (in gigabytes per capita per month), selected countries, 2007–2014**



Source: Report on Telecommunications Markets in the Nordic and Baltic Countries 2014<sup>251</sup>

190. In addition, the following figure shows that Norway had a far lower number of stand-alone MBB subscriptions than most of the countries included in the sample during the Period under Consideration:

**Figure 4: Number of stand-alone MBB subscriptions per capita, selected countries, 2007–2014**



Source: Report on Telecommunications Markets in the Nordic and Baltic Countries 2014<sup>252</sup>

191. Finally, a comparison made by the OECD in 2009 of MBB prices between Norway, Denmark, Finland and Sweden also showed that MBB prices in Norway were either

<sup>251</sup> Nordic and Baltic NRAs, Report on Telecommunications Markets in the Nordic and Baltic Countries 2014 (“The 2014 Nordic and Baltic Regulatory Report”), See Document No 1075351 (page 9).

<sup>252</sup> See Document No 1075351 (page 21).

significantly higher, or MBB packages in Norway generally included a significantly smaller volume of mobile data, compared with neighbouring countries.<sup>253</sup>

#### **8.4.3 Were FBB services part of the same relevant market as residential stand-alone MBB services?**

##### **8.4.3.1 Introduction**

192. In addition to using MBB, consumers could at the relevant time also access the internet through a FBB connection. It is therefore appropriate to assess whether FBB services (including private and (semi-<sup>254</sup>) public Wi-Fi) were in the same relevant market as residential<sup>255</sup> stand-alone MBB services during the Period under Consideration.

193. In Section 8.4.3.2, the Authority will assess demand-side substitution by examining whether FBB services were a substitute for residential stand-alone MBB services (the latter being the focal product in the present case<sup>256</sup>). In Section 8.4.3.3, the Authority considers supply-side substitution.

##### **8.4.3.2 Demand-side substitution**

194. As demonstrated below, during the Period under Consideration, FBB services were an insufficient demand-side substitute for residential stand-alone MBB services. During the Period under Consideration, FBB and residential stand-alone MBB satisfied different needs, rather than being substitutes. In order to reach this conclusion, the Authority has analysed product characteristics, the intended and actual usage and the prices of the two services.<sup>257</sup>

195. As shown in Section 8.4.3.2.3, this conclusion is in line with assessments of Nkom and the Norwegian NCA from the Period under Consideration. It is also in line with the majority view of the NRAs in the EU and the European Commission's decisional practice in telecoms merger cases.

##### **8.4.3.2.1 Product characteristics and usage**

196. MBB and FBB have a number of different characteristics and features.

197. First, the Authority observes that there is a difference in mobility. MBB services provide end users with different functionalities than those offered by FBB services. In particular,

<sup>253</sup> See the OECD report of 30 June 2009 (available at: <<http://www.oecd.org/sti/broadband/43280727.pdf>>, accessed June 2020), Figure 7 at page 14 and Figure 9 at page 19.

<sup>254</sup> See footnote 379 below.

<sup>255</sup> As shown in Section 8.4.6 below, stand-alone MBB services sold to residential customers was a distinct market from MBB services sold to business customers during the Period under Consideration.

<sup>256</sup> Accordingly, the opposite question of whether MBB services can be considered an effective substitute for FBB services (i.e. substitution from FBB to MBB services) is not relevant for the analysis.

<sup>257</sup> See Notice on the definition of the relevant market, paragraph 7, also cited in Section 8.1.1 above.

- MBB gives consumers the ability to communicate, send and receive data and access the internet and other services ‘on the go’.
198. Norwegian customers value wireless mobility highly. As an illustration, the mobile penetration rate in Norway has long exceeded 100% of the Norwegian population.<sup>258</sup>
199. Second, apart from the restriction in mobility which is inherent in FBB, there were other important differences in product characteristics between FBB and MBB services during the Period under Consideration. For example, MBB services typically featured caps<sup>259</sup> on the volume of data which end users could use, as well as slower speeds, compared to FBB services. The fact that end users nevertheless purchased MBB shows that it covered different needs.
200. Regarding differences in intended and actual use, consumer surveys conducted by Telenor confirm that there were differences in preferences and usage patterns between MBB and FBB. As shown in paragraphs 201–204 below, Telenor’s consumer surveys demonstrate that the need to use MBB ‘on the go’ remained an important explanation for why customers in the residential market purchased and actually used MBB throughout the Period under Consideration.<sup>260</sup>
201. An internal Telenor document from 2009 entitled “*Usage Index Mobile Broadband*”<sup>261</sup> shows that, in 2008 and 2009, the main reasons provided as to why Telenor’s customers in the residential MBB market purchased MBB were that it could be “*used everywhere*” (28%), the customer “*cannot get regular [i.e. fixed] broadband*” (26%), MBB could be “*used away from home/work*” (25%), and “*availability/flexibility*” (21%).<sup>262</sup> Telenor’s main conclusions regarding these findings are set out in the same document: “*MBB as a concept still meets consumer demand in a satisfactory manner, in the sense that the motivating drivers for purchases are largely consistent with unique product characteristics. The service is a natural choice for many [consumers] and seems to fulfil a recognised need. [...] MBB seems to fit well in the Telenor-portfolio, as the service*

<sup>258</sup> See, for example, Nkom’s 2006 Market Analysis, paragraph 48: “*At the end of June 2005, there were just over 4.8 million mobile customers in Norway, equivalent to a mobile density of about 104%.*” In 2014, for example, there were 5.9 million mobile telephony subscriptions in Norway (see Nkom’s 2014 e-com market report, page 1), against a population of around 5.1 million (which translates into a coverage ratio of 116% of the Norwegian population). Nkom’s 2014 report is available at: <https://ekomstatistikken.nkom.no/files/ekomportal/2014/Det%20norske%20ekommarkedet%202014.pdf>; accessed June 2020.

<sup>259</sup> See the quoted text in paragraph 209 below.

<sup>260</sup> Nkom came to the same conclusion: see paragraphs 219–220 below.

<sup>261</sup> Translation by the Authority of: “*Bruksindeks Mobilt Bredbånd*”.

<sup>262</sup> See page 22, translation by the Authority of the following extracts: “*Brukes overalt*”, “*Kan ikke få vanlig BB*”, “*Bruk utenfor hjemmet/jobb*” and “*Tilgjengelighet/fleksibilitet*”.

*extends the broadband market without significant cannibalisation of own broadband customers. Few customers want to terminate their subscription of regular broadband.”*<sup>263</sup>

202. Telenor conducted similar surveys in 2010 and 2011. The need to use MBB ‘on the go’ remained an important reason for purchasing MBB (the results were in this regard to a large extent similar to the 2009 survey).<sup>264</sup> When summarising its main conclusions of the 2010 survey, Telenor states that: *“Overall, mobile broadband works well as a service where the customers are satisfied over time and relatively loyal. [...] The customers are satisfied with their type of subscription and there is not much doubt as to whether MBB should be the main or additional access. In this regard, the customers have decided and they switch/supplement to a limited extent [...]. The results are to a large extent similar as the last survey”*.<sup>265</sup>
203. In addition, other surveys conducted by Telenor during the Period under Consideration indicate that the most important reason for purchasing MBB was to use it ‘on the go’:
- (a) A document entitled *“Feedback from Mobile BB customers (private, K&H and FriBruk) May 2009”*<sup>266</sup> shows that the main reasons for why residential customers purchased MBB were *“it can be used everywhere”* (28% in 2008 and 18% in 2009), *“availability/flexibility”* (21% in 2008 and 17% in 2009), *“use at the cabin”* (2% in 2008 and 15% in 2009), *“use outside home/work”* (25% in 2008 and 12% in 2009) and *“cannot get regular [i.e. fixed] broadband”* (26% in 2008 and 19% in 2009).<sup>267</sup>
  - (b) A document entitled *“Broadband and TV survey; Status and development as of Q4 2011”*<sup>268</sup> reports under the heading *“Mobile broadband is purchased in*

<sup>263</sup> See Document No 1097606 (see Telenor’s reply of 15 November 2019 to the Authority’s request for information of 7 November 2019), pages 6 and 7; translation by the Authority of the following extract: *“MBB treffer fortsatt godt med sitt konsept, i den forstand at driverne for kjøp i stor grad samsvarer med unike produkttegenskaper. Tjenesten er et naturlig valg for mange, og ser ut til å dekke et erkjent behov. [...] MBB ser riktig ut i Telenor-porteføljen, for tjenesten utvider bredbåndsmarkedet uten at det er stor kannibalisering på egne bredbåndskunder. Det er få som vil si opp vanlig bredbånd.”*

<sup>264</sup> See Document No 1097608 (see Telenor’s reply of 15 November 2019 to the Authority’s request for information of 7 November 2019), page 42.

<sup>265</sup> See Document No 1097607 (see Telenor’s reply of 15 November 2019 to the Authority’s request for information of 7 November 2019), page 6; translation by the Authority of the following extract: *“Alt i alt fungerer mobil bredbånd bra som en tjeneste der kundene er stabilt fornøyde og relativt lojale. [...] Kundene er fornøyde med egen abonnementsstype og liten tvil om MBB skal være hovedaksess eller tilleggsaksess. Her har de bestemt seg og bytter/supplerer i liten grad. [...] Resultatene er svært like med målingen sist gang.”*

<sup>266</sup> Translation by the Authority of the following extract: *“Tilbakemeldinger fra Mobilt BB-kundene (privat, K&H og FriBruk) mai 2009”*.

<sup>267</sup> See document entitled *“Tilbakemeldinger fra Mobilt BB-kundene (privat, K&H og FriBruk) mai 2009”* (see Document No 1097580; Telenor’s reply of 15 November 2019 to the Authority’s request for information of 7 November 2019), page 13; translation by the Authority of the following extracts: *“Brukes overallt”, “Tilgjengelighet/fleksibilitet”, “Bruke på hytta”, “Bruke utenfor hjemmet/jobb”* and *“Kan ikke få vanlig BB”*.

<sup>268</sup> Translation by the Authority of: *“Bredbånds- og TV-undersøkelsen; Status og utvikling per Q4 2011”*; see Document No 1097676 (see Telenor’s reply of 15 November 2019 to the Authority’s request for information of 7 November 2019), page 76.

*order to get a flexible web-solution for both private and work related usage*<sup>269</sup> that, in 2011, the main reasons why respondents' households had MBB were "it can be used everywhere" (44%), "use in relation to work" (34%), "use at the cabin" (31%), "availability/flexibility" (31%), "needs related to work" (20%).<sup>270</sup> The Authority notes that, although some of the categories suggest that MBB was also used in relation to work,<sup>271</sup> Telenor's own interpretation of the survey, reflected in the heading mentioned above, indicates that the survey also gives specific insights with regard to the residential market.

- (c) A document entitled "*Norwegian consumer mobile broadband portfolio, Banner books results*"<sup>272</sup> of 24 January 2011 shows that, at the beginning of 2011, the main reasons for purchasing MBB were "for usage outside home/work" (23%), "it can be used everywhere" (14%), "I can use it at my cabin" (20%), "I cannot get FBB where I live" (8%) and "flexibility and access to internet" (7%).<sup>273</sup>

204. In the Authority's view, Telenor's surveys show that actual usage was consistent with the reasons for purchasing MBB.<sup>274</sup> Table 6 below contains an extract of key data from the surveys regarding actual usage.

<sup>269</sup> See page 76, translation by the Authority of the following extract/title: "*Mobilt bredbånd anskaffes for å ha en fleksibel nettløsning både privat og i jobb*".

<sup>270</sup> See page 76, translation by the Authority of the following extracts: "*Kan Brukes overalt*", "*Bruke i jobbsammenheng*", "*Bruke på hytta*", "*Tilgjengelighet/fleksibilitet*" and "*Behov i forbindelse med jobben*".

<sup>271</sup> See Reply to the LoF, page 7, second bullet point.

<sup>272</sup> See Document No 1097549 (see Telenor's reply of 15 November 2019 to the Authority's request for information of 7 November 2019), pages 20 and 21.

<sup>273</sup> See page 20, translation by the Authority of the following extracts: "*For bruk utenfor hjemmet/jobb*", "*Det kan brukes overalt*", "*Jeg kan bruke det på hytta*", "*Jeg kan ikke få fastlinje-abonnement der jeg bor*" and "*Fleksibilitet og tilgang til internet*".

<sup>274</sup> "*Usage Index Mobile Broadband*" (translation by the Authority of: "*Bruksindeks Mobilt Bredbånd*") (2010): See Document No 1097607, page 47; and "*Usage Index Mobile Broadband*" (translation by the Authority of: "*Bruksindeks Mobilt Bredbånd*") (2011). See Document No 1097608, page 43.

**Table 6: In which of the following situations do you use MBB?<sup>275</sup>**

	2009 % share of respondents	2010 % share of respondents	2011 % share of respondents
At home <sup>276</sup>	73	68	73
At the cabin/regular vacation location <sup>277</sup>	52	54	56
When travelling/vacation in Norway <sup>278</sup>	40	42	48
When travelling with train, car, bus or boat <sup>279</sup>	31	31	40
Home outdoor/outside garden, terrace, etc. <sup>280</sup>			29 <sup>281</sup>
In relation to work (or school) <sup>282</sup>	29	25	29
In a park, café/on the beach, outside restaurant, etc. <sup>283</sup>	13	12	12
When travelling abroad <sup>284</sup>	8	11	10
At the shopping mall, café restaurant <sup>285</sup>			10
Other situations <sup>286</sup>	2	3	4

205. As indicated in Table 6 above, and as also pointed out by Telenor when summarising a survey from 2011,<sup>287</sup> many customers used MBB at home. In these surveys, the

<sup>275</sup> Translation by the Authority of the following extract: “I hvilke av disse situasjonene bruker du mobilbredbånd?”

<sup>276</sup> Translation by the Authority of the following extract: “Hjemme”/“Hjemme innendørs”. In the 2011 survey this category was split in two, “Home indoor” and “Home outdoor/outside garden, terrace, etc.” See also footnote 280.

<sup>277</sup> Translation by the Authority of the following extract: “På hytt/ferie/feriested”.

<sup>278</sup> Translation by the Authority of the following extract: “På reiser/ferie i Norge”.

<sup>279</sup> Translation by the Authority of the following extract: “På reiser med tog, bil, buss el. båt”.

<sup>280</sup> Translation by the Authority of the following extract: “Hjemme utendørs hage, terrasse, m.m.”

<sup>281</sup> In the survey relating to 2011 (see Document No 1097608, page 42), the category “home outdoor/outside” (see footnote 280) was reported by 29%. This category was not present in the survey relating to 2009–2010 (see Document No 1097607, page 47).

<sup>282</sup> Translation by the Authority of the following extract: “I jobb/skolesammenheng”/“I jobb-sammenheng”.

<sup>283</sup> Translation by the Authority of the following extract: “I park, kafé, e.l.”/“I park, på stranden, uterestaurant o.l.”

<sup>284</sup> Translation by the Authority of the following extract: “På reiser i utlandet”.

<sup>285</sup> Translation by the Authority of the following extract: “På kjøpesenter, kafé, restaurant”.

<sup>286</sup> Translation by the Authority of the following extract: “Andre situasjoner”.

respondents were asked to submit information on all locations where MBB was used.<sup>288</sup> In the Authority's view, as customers are likely to spend more time at home compared to being 'on the go' or at their cabin, it is only natural that MBB is often used at home. However, and more importantly, the fact that many customers used MBB at home sheds limited light on the substitutability between MBB and FBB. The share of customers that used MBB only at home was relatively stable in the period 2008 to 2010 (24% in 2010).<sup>289</sup> In other words, most customers used MBB in a range of different situations. Further, in the document summarising the survey from 2011, it is stated that: "*The usage pattern is to a large extent stable compared to earlier, however the usage tends to increase while on the go.*"<sup>290</sup>

206. In relation to the share of customers that used MBB only at home, the Authority notes that a Telenor document entitled "*Feedback from Mobile BB customers (private, K&H and FriBruk) May 2009*"<sup>291</sup> states that "*Primary-access*"<sup>292</sup> customers more often justify their purchase of MBB by reference to the fact that they cannot get regular [i.e. fixed] broadband at home and because it is cheaper".<sup>293</sup> In the Authority's view, this shows that many of the customers who used MBB only at home were of the belief, for whatever reason, that FBB was simply not available. Therefore, for these customers, just like for those seeking 'on the go' use, FBB was also not an alternative.
207. Moreover, MBB has traditionally been the preferred product for accessing the internet in secondary homes or locations where FBB was either not available or was too costly for a limited usage.<sup>294</sup>
208. According to Telenor, the respondents who claimed that they did not have access to FBB at home were either wrong or not referring to home usage. In this context, Telenor refers to a study from 2008 showing that 97.8% of Norwegian households had access to FBB.<sup>295</sup>

<sup>287</sup> See Document No 1097608, page 8, and Reply to the LoF, page 6.

<sup>288</sup> See Document No 1097607, page 47.

<sup>289</sup> See Document No 1097607, page 47: "*Andelen som bruker kun hjemme har vært konstant med ca. en fjerdedel i hver av de tre målingene, denne gang 24%*", translation by the Authority: "*The proportion who use [MBB] only at home has been constant with approx. one quarter in each of the three measurements, this time 24%*".

<sup>290</sup> See Document No 1097608 page 43; the Authority's translation of the following extract: "*Bruksmønsteret er stort sett stabilt fra tidligere, men tendens til øket bruk mens man er på farten.*" See also Document No 1097607, page 47, entitled: "*Bruksmønsteret er svært stabilt*" (translation by the Authority: "*The usage pattern is very stable*").

<sup>291</sup> Translation by the Authority of the following extract: "*Tilbakemeldinger fra Mobilt BB-kundene (privat, K&H og FriBruk) mai 2009*"; see Document No 1097580, page 23.

<sup>292</sup> Primary-access customers are customers that have MBB as their primary source of access to the internet.

<sup>293</sup> Translation by the Authority of the following extract: "*Primeraksesskundene grunngir anskaffelsen av MBB oftere med at de ikke kan få vanlig BB hjemme og at det er billigere med MBB*". The Authority notes that this quote also refers to MBB being used "because it is cheaper". The Authority understands this as primarily referring to situations where the installation or the subscription fee for FBB was too expensive compared to its intended use.

<sup>294</sup> See Nkom's 2016 Market Analysis, paragraph 112 and Annex 13 to the Reply to the SO (Document No 802047), paragraph 199, where Telenor agrees with this.

<sup>295</sup> See Reply to the LoF, pages 8 and 9.

However, the fact that it was technically feasible for most households to install FBB, does not mean that all customers believed in practice that this was possible. In the Authority's view, the latter factor is more relevant in this context. This is also reflected in one of Telenor's surveys,<sup>296</sup> where the respondents can reply "*No good solution for FBB where I live*".<sup>297</sup> The Authority notes that also other surveys conducted by Telenor refer to the fact that some customers could not get FBB at home.<sup>298</sup> Finally, there is no contemporary evidence or documentation suggesting that Telenor, at the time, considered that the respondents were wrong or had misunderstood the question.

209. The Authority's understanding of the consumer surveys listed above is also confirmed by the view presented by Telenor in a meeting with Nkom in 2011, entitled "*Actors' Meeting - Broadband*",<sup>299</sup> which was that FBB and MBB were complementary products during the Period under Consideration:<sup>300</sup>

*"Fixed and mobile broadband*

- *Do not appear as substitutes today – and will scarcely be so in a three years perspective*
- *Marketed as a complementary product – and considered as one*
- *Many users of mobile broadband face higher prices*
  - *Volume constraints on mobile broadband*
    - *Volume pricing if usage exceeds included volume*
  - *On fixed broadband prices are not linked to usage*
  - *Greater variation in speed on mobile*
- *Some households only have mobile broadband*
- *Often linked to a demand for mobility which fixed broadband cannot meet (for instance tablets).*
- *[...]"*

<sup>296</sup> See Document No 1097549, page 2.

<sup>297</sup> See the following question: "*Hvorfor har du ikke fastlinje bredbåndsabonnement hjemme?*" and possible answer: "*Det finnes ingen gode løsninger for fastlinje bredbåndsabo.*" (translation by the Authority: "*Why don't you have a FBB subscription at home?*"; "*There are no good solutions for FBB*"). For instance, MBB customers that rented an apartment may not have had the willingness to pay for installation of FBB. In addition, as also explained by Telenor at page 7 of the Reply to the LoF, some customers did not want to pay for two subscriptions. For those customers who had a specific need for MBB, FBB may not have been an alternative.

<sup>298</sup> See Document No 1097549, page 2.

<sup>299</sup> Translation by the Authority of: "*Aktørmøte - Bredbånd*".

<sup>300</sup> See Document No 1109084 (see Nkom's reply of 20 January 2020 (Document No 1109079) to the Authority's request for information of 13 January 2020), page 12; translation by the Authority of the following extract: "*Fast og mobil bredbånd / • Framstår i dag ikke som substitutter – og vil neppe gjøre det i et treårsperspektiv / • Markedsføres som et komplement – og ansees som det / • Høyere pris for mobil bredbånd for mange brukere - Volumbegrensninger på mobil bredbånd - Volumprising etter nådd tak - Volumuavhengig pris på fast bredbånd / • Større variasjon i nedlastingshastighet på mobil / • Noen husholdninger har kun mobil bredbånd - Ofte knyttet til mobilitetsbehov som fast bredbånd ikke kan støtte (for eksempel nettbrett)*".

210. According to Telenor, this presentation does not shed light on the relevant question in this case, namely whether FBB constrained MBB.<sup>301</sup> In the Authority's view, however, even though FBB may be the focal product in Telenor's presentation, the arguments relied on in order to explain why FBB and MBB were complementary products are still relevant for the definition of the relevant market in this case. The Authority notes that Telenor informed Nkom that FBB and MBB were marketed and considered as complementary products. Assuming that this statement is correct, it must also follow that MBB and FBB were complementary products, as, logically speaking, a product cannot be considered as complementary in one direction and not in the other. Further, Telenor refers to the fact that demand for MBB was linked to a demand for mobility which FBB could not meet. This is in line with the Authority's interpretation of Telenor's customer surveys set out above.<sup>302</sup>
211. The Authority observes that statements submitted to Nkom by other firms operating in the residential MBB market, namely Telia and Ventelo, are in line with Telenor's view in the above-mentioned presentation to Nkom. In particular, Telia stated that "*mobile broadband is an alternative and an additional service, but not a substitute to fixed broadband*", while Ventelo claimed that mobile data would be a supplement to FBB and not a substitute.<sup>303</sup>
212. Furthermore, the following internal Telenor documents also indicate that MBB and FBB were complementary products during the Period under Consideration:
- (i) A strategy document from 2009, setting out a proposed strategy for the MBB market, states, under the heading "*Mobile broadband as a complementary product to fixed – aim for similar market share to mobile telephony*", that "*Mobile broadband shows good growth in both of the main segments. There is a risk that competitors will position mobile broadband as a substitute to fixed broadband. This shall be avoided through market mix and PR*".<sup>304</sup> This document indicates that, since 2009, Telenor may have pursued a strategy aimed at avoiding competitive convergence arising between different categories of products it offered.<sup>305</sup> The evidence referred to by the Authority in this section

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<sup>301</sup> See Reply to the LoF, page 3.

<sup>302</sup> Telenor also claims in its Reply to the LoF, page 4, that MBB was inferior to FBB, due to quality and coverage, and that it is more likely that a superior product exerts competitive pressure on the inferior product, than vice versa. While it is correct that FBB services usually had higher download speed and bandwidth, the fact that consumers still demanded MBB shows, however, in the Authority's view, that the intended usage for the two products differed.

<sup>303</sup> See Document No 1109087, page 2; translation by the Authority of the following extract: "*mobilt bredbånd er et alternativ og en ekstratjeneste, men ikke som substitutt for fast bredbånd*", and Document No 1109085, page 3: "*Mobildata vil i overskuelig fremtid være et supplement til fastaksesser og ikke et substitutt*"; translation by the Authority: "*Mobile data will in the foreseeable future be a supplement to fixed access and not a substitute*" (see Nkom's reply of 20 January 2020 to the Authority's request for information of 13 January 2020).

<sup>304</sup> See Document No 656831, RWI 7, page 20/24; translation by the Authority of the following extracts: "*Mobil bredbånd som komplement til fast - mål om lik andel som mobiltelefoni*", "*Mobil bredbånd viser god vekst i begge hovedsegment. Det er en risiko for at konkurrenter vil posisjonere det som et substitutt til fast bredbånd. Gjennom markedsmix og PR skal dette unngås.*"

<sup>305</sup> See also Reply to the LoF, page 11, first paragraph.

confirms that Telenor succeeded in this regard during the Period under Consideration.

- (ii) An internal e-mail from 24 November 2009, where Telenor Norway's CEO commented on Telenor's draft reply to a public consultation on Market 15 (the wholesale market for access and call origination on public mobile telephone networks)<sup>306</sup> by Nkom, stating that MBB services must be considered as a complementary product to FBB:<sup>307</sup> *"As regards large screen/mobile broadband, this is currently a complementary product to fixed broadband, [...]"*
  - (iii) A document from 2011 entitled *"Usage Index Mobile Broadband"*<sup>308</sup> shows that 76% of the respondents intended to keep both their MBB and their FBB subscriptions (see category *"Beholde begge"*). Only 10% intended to terminate their MBB subscription (see category *"Si opp Mobilt bredbånd"*), while 4% intended to terminate their FBB subscription (see category *"Si opp vanlig bredbånd"*).<sup>309</sup> The Authority notes that 95% of the respondents in this survey paid for the subscription themselves.<sup>310</sup>
213. As regards the strategy document from 2009 (see point (i) in paragraph 212 above), Telenor claims that the statement supports the fact that MBB and FBB were substitutes and that Telenor saw this risk and wanted to avoid it to the extent possible.<sup>311</sup> In the Authority's view, as is evident from this document, Telenor may have pursued a conscious strategy from 2009 aimed at eliminating the risk that consumers would see these two services as substitutes. The documents referred to in this section indicate that Telenor succeeded in this regard.
214. The complementary nature of MBB and FBB services can also be inferred from a consumer survey conducted by Nkom in 2013.<sup>312</sup> According to Nkom, this survey indicates that residential consumers did still not see FBB as a substitute to MBB access.<sup>313</sup> The survey shows that 82.6% of the respondents that had an MBB subscription,

<sup>306</sup> Market 15 of the 2004 Recommendation on relevant markets.

<sup>307</sup> See Document No 658338, EES 71, page 1/2; translation by the Authority of the following extract: *"Når det gjelder stor skjerm/mobilt bredbånd er dette per i dag et komplementært produkt til fast bredbånd, [...]"*.

<sup>308</sup> Translation by the Authority of: *"Bruksindeks Mobilt Bredbånd"*.

<sup>309</sup> See Document No 1097608 (see Telenor's reply of 15 November 2019 to the Authority's request for information of 7 November 2019), page 56; translation by the Authority.

<sup>310</sup> See page 6. According to Telenor, the Authority should take into account that having two accesses was more common in the business segment, see Reply to LoF, page 11. However, the fact that 95% of the subscribers paid for the subscription themselves indicates that this survey mainly concerns customers in the residential market.

<sup>311</sup> See Reply to the LoF, page 11, first paragraph.

<sup>312</sup> See Nkom's *"Analysis of the market for wholesale (physical) network infrastructure access (including shared or fully unbundled access) at a fixed location (LLU market) and the market for wholesale broadband access (Broadband Access market) (Market 4 and Market 5)"* of 20 January 2014 (*"Nkom's 2014 Market Analysis for Markets 4 and 5"*) (Annex 1 to the Decision of 20 January 2014 for Markets 4 and 5), page 28; see Document No 1075314. The markets concerned were "Markets 4 and 5" as listed in the 2008 Recommendation on relevant markets.

<sup>313</sup> See Nkom's 2014 Market Analysis for Markets 4 and 5, paragraph 112 at page 28. Nkom further notes the following in the same paragraph: *"One of the most important reasons why end users choose to buy a mobile*

also had an FBB subscription.<sup>314</sup> In the Authority's view, the fact that most customers in the residential MBB market chose to have both subscriptions is an indication that FBB was a complementary service, rather than a substitute.

215. The findings in the survey conducted by Nkom are also consistent with several consumer surveys conducted by Telenor in the period 2007–2008:

- (a) A document from 2008, entitled "*Target audience analysis: who has bought MBB (the entire market, not just Telenor customers) Source: The Access Survey*",<sup>315</sup> discusses a survey from 2008. The document states: "*Mobile broadband – primarily for those who also have regular broadband at home. Approximately 5% of those who have Mobile Broadband do not have internet connection at home. Source: Aksessundersøkelsen, approximately 2000 interviews in the population 15+. The whole market: Not only Telenor customers.*"<sup>316</sup>
- (b) A presentation, summarising surveys carried out in 2008 entitled "*Broadband survey – Draft presentation Q4 2008*"<sup>317</sup> states that "*Increased share has MBB, however the vast majority use it as an additional subscription*".<sup>318</sup> According to this presentation, 85.6%<sup>319</sup> of the MBB customers also had an FBB subscription.<sup>320</sup>

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*network-based broadband subscription is the desire to be able to consume broadband content, and send and receive data traffic, regardless of where they are."*

<sup>314</sup> 19% had FBB and MBB, 4% had only MBB. Share with only MBB:  $4/23 = 17.4\%$ . Share with both MBB and FBB:  $100-17.4 = 82.6\%$ .

<sup>315</sup> Translation by the Authority of: "*Målgruppeanalyse: hvem har kjøpt MBB (hele markedet, ikke bare Telenor-kunder) Kilde: Aksessundersøkelsen*".

<sup>316</sup> See Document No 1097521 (see Telenor's reply of 15 November 2019 to the Authority's request for information of 7 November 2019), page 9; translation by the Authority of the following extract: "*Mobilt bredbånd – først og fremst for de som også har vanlig internett hjemme / Ca 5% av de som har Mobilt Bredbånd har ikke internettilknytning hjemme Kilde: Aksessundersøkelsen, ca 2000 intervju i befolkningen 15+. HELE MARKEDET: IKKE KUN TELENOR-KUNDER*". See also Document No 1097514 (see Telenor's reply of 15 November 2019 to the Authority's request for information of 7 November 2019), page 2.

<sup>317</sup> Translation by the Authority of: "*Bredbåndsundersøkelse Utkast til presentasjon Q4 2008*".

<sup>318</sup> See Document No 1097658 (see Telenor's reply of 15 November 2019 to the Authority's request for information of 7 November 2019), page 32; translation by the Authority of the following extract: "*Økt andel med MBB, men de aller fleste benytter det som tilleggsabonnement*".

<sup>319</sup>  $13.9\%$  of the respondents had MBB, while  $11.9\%$  had MBB as a supplementary access.  $11.9/13.9 = 0.856 = 85.6\%$ .

<sup>320</sup> According to Telenor this survey includes business customers. Telenor claims that it was mostly business users that had MBB as a complementary access form (see Reply to LoF, page 11). The Authority notes however, that page 32 in the presentation explains that less than 15% of the customers included in the survey used MBB only for work, while almost 40% used it only at home. Therefore, this survey also sheds light on residential customers' usage of MBB as an additional subscription.

216. Finally, the Authority notes that both services grew in parallel, which further confirms that they were distinct products.<sup>321</sup> In footnote 45 of its Reply to the SSO, Telenor notes that between 2008 and 2010 the number of customers reported as having Wi-Fi at home had increased from 74% to 86%. It can be seen from Table 2 at paragraph 183 above that the number of subscribers for stand-alone MBB nevertheless almost doubled in the same period.

#### 8.4.3.2.2 Prices

217. The Authority observes that the prices (per MB) of MBB services were higher compared to those for FBB services.<sup>322</sup> The fact that consumers nevertheless bought residential MBB, in addition to FBB, indicates that the products met different consumer needs and were therefore complementary.

#### 8.4.3.2.3 Decisional practice of Nkom, the NRAs, the Norwegian NCA and the European Commission

218. The Authority's conclusion that MBB and FBB services were complementary services rather than substitutes, and therefore belonged to different product markets, is in line with assessments of Nkom and the Norwegian NCA from the Period under Consideration. It is also in line with the majority view of the NRAs in the EU, as well as with the European Commission's decisional practice in telecoms merger cases.

219. In its assessment of FBB and MBB services in the period 2005–2009, Nkom concludes that *“the use of fixed network-based and mobile-based broadband access is complementary for most end users, and the degree of substitutability is considered to be small. [...] Pointing in the same direction is the fact that fixed network-based broadband access does not provide the capacity for access to broadband content from locations other than where broadband connection has been established. One of the most important reasons why end users choose to buy a mobile network-based broadband subscription is the desire to be able to consume broadband content, and send and receive data traffic, regardless of where they are. Fixed network-based broadband access is not a substitute for this application. An evaluation of demand-side substitution in the retail market*

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<sup>321</sup> See Nkom's 2014 Market Analysis for Markets 4 and 5, paragraph 109: “[...] Nevertheless, NPT [Nkom's predecessor] is under the clear impression that the end users who have access to fixed network-based broadband access primarily view mobile broadband access as a supplement to, rather than replacement for, the fixed broadband access. NPT finds that most providers share this view. The fact that the number of fixed broadband subscriptions continue to increase, while the mobile broadband penetration increases sharply, also indicates that most people consider mobile broadband as a supplement to fixed broadband access.” Nkom's assessment concerned the period from 2010 until 2014.

<sup>322</sup> See Telenor's presentation entitled “Actors' Meeting - Broadband” in a meeting with Nkom in 2011 (see Document No 1109084, page 12), quoted in paragraph 209 above. When explaining why MBB is regarded as a complementary product and not as a substitute to FBB (the latter being the focal product in the presentation), Telenor refers to the fact that many MBB users face higher prices due to the fact that there are volume restrictions on MBB (volume-based pricing after a certain usage volume is exceeded), whereas the prices for FBB are volume independent. See also the BEREC Report referred to in footnote 327 below.

*indicates on this basis that mobile network-based and fixed network-based broadband access constitute different relevant product markets.*<sup>323</sup>

220. In its assessment of FBB and MBB services in the period from 2010 until 2014, Nkom concludes that “[...] a fixed broadband access cannot be a substitute for a mobile broadband access, since a fixed broadband access does not enable access to broadband content from other locations than where the broadband connection is established. One of the most important reasons why end users choose to buy a mobile network-based broadband subscription is the desire to be able to consume broadband content, and send and receive data traffic, regardless of where they are. An evaluation of demand-side substitution in the retail market indicates on this basis that mobile network-based and fixed network-based broadband access constitutes different relevant product markets”.<sup>324</sup>
221. Thus, during the Period under Consideration, Nkom found that FBB was not an appropriate substitute for MBB and belonged to a separate relevant product market. The main reason for this finding was the fact that FBB could not be used ‘on the go’.<sup>325</sup>
222. Additionally, as late as in 2016, Nkom concluded that FBB would, only to a limited extent, have a disciplinary effect on MBB and the two types of services were thus not substitutable from an end user’s perspective.<sup>326</sup>
223. The Authority notes that Nkom’s findings are in line with the majority view of the NRAs in the EU. The latter have examined the extent to which fixed and mobile services can substitute for each other. The majority found that such services belong to separate retail markets, mainly for the reasons which the Authority has discussed in Sections 8.4.3.2.1 and 8.4.3.2.2 above.<sup>327</sup>

<sup>323</sup> See Document No 1114287, Nkom’s Analysis of the wholesale market for full and shared access to fixed access networks (LLU market) and the wholesale market for broadband access services (broadband access market) of 3 April 2009 (i.e. Markets 4 and 5 (wholesale markets for FBB services) of the Authority’s 2008 Recommendation on relevant markets), paragraphs 98–99; available at: <https://www.eftasurv.int/cms/sites/default/files/documents/gopro/319-521115.PDF>; accessed June 2020.

<sup>324</sup> See Nkom’s 2014 Market Analysis for Markets 4 and 5, paragraph 112. This extract clearly shows that, although this market analysis concerned the fixed markets, Nkom also examined the question that is relevant in the present case, i.e. whether FBB is a substitute for MBB. Telenor’s argument in the Reply to the SSO (see Annex 1 to the Reply to the SSO – CRA Comments, paragraph 51) that the reference to this Nkom decision is irrelevant is therefore unfounded.

<sup>325</sup> See footnote 313 above.

<sup>326</sup> See Nkom’s 2016 Market Analysis, paragraphs 110–114.

<sup>327</sup> In 2012, the Body of European Regulators for Electronic Communications (BEREC) reported that the majority of NRAs reached the conclusion that fixed and mobile services belong to separate markets given: “(i) the existence of different characteristics between fixed and mobile offers (e.g. differences in price, bandwidth, mobility and usage limitations); and (ii) the existence of different preferences and different usage patterns between fixed and mobile services users”. See page 2 of BEREC, Report on Impact of Fixed-Mobile Substitution in Market Definition, BoR (12) 52 (see Document No 1075372).

224. Similarly, the Norwegian NCA, in a merger decision from 2012 involving Telenor, found that “*Mobile broadband is available where a fixed access is not, which indicates that this product for most purposes is complementary to fixed access*”.<sup>328</sup>
225. Furthermore, in its more recent (2015) merger case involving Telia and Tele2, the Norwegian NCA also concluded that, due to different features and functionalities, FBB and mobile data services belonged to separate markets, although it noted that it is conceivable that FBB can be a substitute for mobile data services for some users.<sup>329</sup>
226. In its Decision V2018-20, the Norwegian NCA came to the same conclusion for the period between 18 August 2010 and 30 June 2014,<sup>330</sup> i.e. the period which was relevant for the NCA’s case and which partially overlaps with the Period under Consideration in the present case.<sup>331</sup>
227. Finally, the Authority’s assessment is also in line with the European Commission’s decisional practice in telecoms merger cases, which has consistently confirmed that FBB services are not a substitute for mobile data services and therefore do not form part of the same product market.<sup>332</sup> Telenor recognises this Commission practice.<sup>333</sup>

#### 8.4.3.2.4 Consideration of Telenor’s arguments

228. The Authority’s conclusion that residential stand-alone MBB and FBB belong to distinct product markets is robust to Telenor’s arguments to the contrary. These arguments are discussed in the following paragraphs.

<sup>328</sup> See Document No 1114289, the Norwegian NCA’s Decision V2012-8 – *Telenor Norge AS – LOS Bynett AS / Bynett Privat AS* of 23 March 2012 (available at: <<https://konkurransetilsynet.no/decisions/1708-v2012-8/>>, accessed June 2020), paragraph 79; translation by the Authority of the following extract: “*Mobilt bredbånd er tilgjengelig der fast aksess ikke er det, noe som indikerer at dette produktet for de fleste formål vil være komplementært til fast aksess*”.

<sup>329</sup> The Norwegian NCA’s Merger Decision V2015-1 (Document No 1075334), paragraphs 144–145 and 148. Although the Norwegian NCA assessed FBB versus mobile data services in general (including both MBB and MTDS), the Authority considers that the reasons for considering that FBB services were not a valid substitute for mobile communications services (or mobile data services in general) are equally relevant when comparing FBB to residential stand-alone MBB.

<sup>330</sup> This was further confirmed by the Norwegian Competition Tribunal, albeit for a slightly shorter period, i.e. from 18 August 2010 to 6 December 2013 (see the Competition Tribunal’s Decision V03/2019, paragraph 580).

<sup>331</sup> The Norwegian NCA’s Decision V2018-20, Section 9.2.3.9 and paragraph 464.

<sup>332</sup> See, for example, Commission’s Decision of 12 December 2012 in Case M.6497 – *Hutchison 3G Austria/Orange Austria*, in particular, paragraphs 55–57; Commission’s Decision of 2 July 2014 in Case M.7018 – *Telefónica Deutschland/E-Plus* (“*Telefónica Deutschland/E-Plus* Decision”), in particular, paragraphs 60–64; Commission’s Decision of 19 May 2015 in Case M.7421 – *Orange/Jazztel*, paragraphs 50–53; Commission’s Decision of 11 May 2016 in Case M.7612 – *Hutchison 3G UK/Telefónica UK*, in particular, paragraphs 252 and 253; and Commission’s Decision of 1 September 2016 in Case M.7758 – *Hutchison 3G Italy/Wind/JV*, paragraphs 125–126.

<sup>333</sup> See Reply to the SO, paragraph 96.

## 8.4.3.2.4.1 Telenor's interpretation of the consumer surveys

229. According to Telenor, the surveys mentioned above show that MBB was a substitute to, and faced significant competitive pressure from, FBB throughout the Period under Consideration.<sup>334</sup> In essence, Telenor's conclusion is built on its understanding that MBB was a substitute to FBB, the usage of MBB was not truly mobile, MBB and FBB were not complementary products, and customers did substitute MBB with FBB. The Authority disagrees with Telenor's interpretation for the following reasons.
230. First, regarding Telenor's observation that MBB was a substitute to FBB,<sup>335</sup> the Authority notes that this issue is of minor importance in the present case, where the relevant question is whether FBB was a valid alternative for residential stand-alone MBB. In its Reply to the LoF, Telenor seems to agree with this.<sup>336</sup>
231. In any event, in the Authority's view, several of the documents referred to by Telenor actually indicate that MBB was not a good alternative to FBB. See, for example:
- (i) A presentation entitled "*Broadband survey – Draft presentation Q4 2008*"<sup>337</sup> from December 2008, which states: "*Increased share with MBB, however the vast majority use it as an additional subscription*";<sup>338</sup>
  - (ii) A presentation from December 2008 regarding churn, where, under the heading "*Summary*", it is stated that "*So far low churn*"<sup>339</sup> from 'ordinary' broadband to mobile broadband'.<sup>340</sup>
232. Second, the Authority disagrees with the interpretation of internal documents referred to by Telenor regarding whether usage of MBB was truly mobile,<sup>341</sup> and the complementarity of MBB and FBB. Regarding the former, in the Authority's view, the documents referred to by Telenor in fact confirm that MBB was purchased primarily to

<sup>334</sup> See Telenor's letter of 10 December 2019 (Document No 1103119), page 1.

<sup>335</sup> In this context Telenor refers to Document No 1097658, page 9; Document No 1097666, page 19; Document No 1097656, page 54; Document 1097654, page 45; Document No 1097661, page 6; Document No 1097608, pages 9, 57 and 58; Document No 1097549, page 2, and Document No 1097676, page 74.

<sup>336</sup> See Reply to the LoF, page 3.

<sup>337</sup> Translation by the Authority of: "*Bredbåndsundersøkelse – Utkast til presentasjon Q4 2008*".

<sup>338</sup> See Document No 1097658 (see Telenor's reply of 15 November 2019 to the Authority's request for information of 7 November 2019), page 32, the Authority's translation of the following extract: "*Økt andel med MBB, men de aller fleste benytter det som tilleggsabonnement*". According to the statistics presented on this slide, 86% of the respondents that had a MBB subscription also had a FBB subscription (11.9%/13.9% = 85.6%). See Document entitled "*Bredbåndsundersøkelse – Utkast til presentasjon Q4 2008*" (Document No 1097656), pages 56 and 57: "*Økt andel med MBB, men de aller fleste benytter det som tilleggsabonnement*".

<sup>339</sup> The term 'churn' or 'churning' means to move away from or abandon a product.

<sup>340</sup> See Document No 1097666, page 23; the Authority's translation of: "*Foreløpig lite churn fra 'vanlig' bredbånd til mobilt bredbånd*".

<sup>341</sup> See Document No 1097580, page 14, and Reply to the LoF, page 8.

use ‘on the go’.<sup>342</sup> Regarding Telenor’s interpretation of evidence related to the complementarity of MBB and FBB,<sup>343</sup> the Authority notes that, as pointed out in Section 8.4.3.2.1 above, the vast majority of evidence available indicates that customers considered MBB and FBB to be complementary products. So did Telenor in a meeting with Nkom in 2011, as outlined in paragraph 209 above.

233. Third, Telenor refers to the results of three surveys (the first conducted in December 2008, the second in December 2009/January 2010 and the third in August 2010) in its Reply to the SO as evidence that customers did substitute MBB with FBB.<sup>344</sup> In this context, Telenor also points to a number of other surveys in its letter of 10 December 2019<sup>345</sup> and its Reply to the LoF.<sup>346</sup>
234. The Authority disagrees with Telenor that the survey results of 2008 and 2010 referred to in the Reply to the SO show a substitution effect from MBB to FBB, to the extent that both services should be considered as part of the same relevant product market.
235. First, these surveys mainly show that MBB (for use at home) was not a good alternative for FBB. This issue is, however, irrelevant in the present case, where the relevant question is whether FBB was a valid alternative for MBB (for use ‘on the go’). The surveys show that some of Telenor’s customers had tried to use MBB at home as a substitute for FBB. MBB for use at home did not, however, appear to be a good alternative for FBB and this explains why many of the respondents terminated their MBB subscription. This is confirmed by the fact that the main reasons for churning away from MBB were “*poor coverage where I live*”, “*poor network capacity*” and “*too expensive*”. This is further supported by Telenor’s own conclusions on the surveys at the time, which stated that Telenor should make customers aware of the drawbacks of using MBB as a primary access product and mitigate client expectations in this regard.<sup>347</sup>
236. Second, the Authority also disagrees with Telenor’s interpretation of the survey results.

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<sup>342</sup> See Document No 1097580 (see footnote 267 above), page 13, which shows that the most important reason to purchase MBB was to use it ‘on the go’. The fact that many customers used MBB at home, does not alter the Authority’s finding that MBB was primarily purchased to use ‘on the go’.

<sup>343</sup> See for example Document No 1097607, page 61 and Telenor’s letter to the Authority of 10 December 2010, page 8.

<sup>344</sup> The results of these surveys are reported in three internal Telenor presentations. The first two are included as, respectively, Annex 1 (Telenor, *Churnede privat-Kunder på mobilt bredbånd*; which concerns the period October 2008 – November 2008; see Document No 802035) and Annex 2 (Churnede privat-Kunder på mobilt bredbånd; which concerns the period December 2009 – January 2010; see Document No 802036) to the Reply to the SO. Annex 2 contains only the main findings, but does not reproduce the underlying figures. In addition, in paragraph 200 of Annex 13 to the Reply to the SO, Telenor refers to a survey conducted in “August 2010” (Telenor, *Mobilt bredbånd: Churn*). This survey was sent to the Authority on 20 January 2020 (see Document No 1108919). See also Reply to the SO, Section 3.4.3.2.

<sup>345</sup> See Document No 1097623, page 26, and Document No 1097549, page 16; and Document No 1103119, Telenor’s letter to the Authority of 10 December 2019, pages 9-10.

<sup>346</sup> See Document No 1097549, pages 16 and 17; Document No 1097580, page 3; Document 1097606, page 17; and Document No 1097529, pages 2 and 5; and Reply to the LoF, Section 3.1.

<sup>347</sup> See 2008 survey (Annex 1 to the Reply to the SO), page 6.

237. Telenor submits that “for close to 40% of churning<sup>348</sup> subscribers, MBB was for use at home”.<sup>349</sup> The Authority notes that the surveys referred to by Telenor do not provide information on churn numbers as such, but rather qualitative explanations for terminating the MBB subscription. This is also reflected in the numbers reported by Telenor, which add up to more than 100%. This indicates that the respondent could give multiple answers when replying to the survey. In the Authority’s view, this shows that Telenor’s claim that close to 40% of churning subscribers bought MBB for use at home lacks relevance and thus probative value, as those respondents who replied “*bought regular broadband at home, did not need MBB anymore*” may also have been (in whole or in part) the same respondents as those who replied “*poor coverage where I live.*” It is therefore not appropriate to sum up the percentages of these two categories of answers, as Telenor suggests.
238. In any event, only a minority of customers who terminated their MBB subscription with Telenor (17% in 2008 and 25% in 2010)<sup>350</sup> said that they had done so because they had purchased FBB at home, which indicates a limited extent of substitution from MBB to FBB services. In this context, the Authority observes that other surveys conducted by Telenor indicate that even fewer customers terminated their MBB subscription with Telenor because they had purchased FBB at home. Specifically, consumer surveys show that in 2012 the average number of customers reporting that they had terminated their MBB subscription because they had installed FBB at home was below 10%.<sup>351</sup>
239. Telenor also claims that “for many if not most, FBB would have been an alternative at home” and that in one of the surveys “41% reported that the most important reason for their original purchase of stand-alone MBB was for use at home”.<sup>352</sup> The Authority however notes that another internal document records that “Primary-access customers more often purchase MBB due to the fact that they cannot get regular [i.e. fixed] broadband at home and because it is cheaper”.<sup>353</sup> In the Authority’s view, therefore, the appropriate conclusion to draw from the evidence on this point is simply that, for a significant proportion of the customers who had a MBB subscription, FBB was, in practice, not available.
240. Telenor further states that “around 80% of those that churned dropped stand-alone MBB altogether rather than switched to a competitor’s stand-alone MBB plan (79% in 2008 and 82% in 2010)” and “only 13% of churners reported that they ended their MBB subscription because they only needed it temporarily”. In Telenor’s view, this suggests

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<sup>348</sup> By “churning” customers Telenor means customers that had recently terminated their stand-alone MBB subscription with Telenor; see also footnote 339 above for the meaning of “churn” or “churning”.

<sup>349</sup> Annex 13 to the Reply to the SO, paragraph 200.

<sup>350</sup> Annex 13 to the Reply to the SO, paragraph 200.

<sup>351</sup> See document entitled “Churn analysis Mobile Broadband (MBB) Q4 2012” (translation by the Authority of: “Churnanalyse Mobilt Bredbånd (MBB) Q4 2012”); see Document No 1097529; see Telenor’s reply of 15 November 2019 to the Authority’s request for information of 7 November 2019, page 6: category “Fått fast bredbånd hjemme” (the Authority’s translation: “have installed FBB at home”).

<sup>352</sup> Annex 13 to the Reply to the SO, paragraph 200.

<sup>353</sup> See Document No 1097580, page 23 and footnote 293 above.

that “the majority of those that dropped MBB altogether found alternatives for their broadband needs”.<sup>354</sup> In its Reply to the LoF, Telenor points to similar findings in three other surveys. According to Telenor, it is a safe assumption that the majority of the respondents that terminated their MBB subscription did not plan to cease their use of the internet, and that this clearly shows other types of access were available.<sup>355</sup>

241. In this context, the Authority notes that, in the 2008 survey, in response to the question of whether they *already* had FBB at home when they acquired their MBB subscription, the vast majority of respondents<sup>356</sup> responded that indeed, they had FBB at home before they had bought MBB. In the Authority’s view, this is evidence that MBB users viewed MBB and FBB as complementary (rather than substitutable) services, i.e. that MBB and FBB satisfied different needs – internet access ‘on the go’ and at home respectively. This is also coherent with the vast majority of evidence presented by the Authority in Section 8.4.3.2.1.
242. Moreover, while the Authority agrees that the majority of the respondents that terminated their subscription would probably continue to use internet at home, also after terminating their MBB subscription, this does not imply that they considered FBB as a substitute to MBB. In this context, the Authority notes that many respondents explained that they terminated their subscription due to the fact that they didn’t use it.<sup>357</sup> This suggests that the respondents left the market for MBB, which cannot be interpreted as a valid indicator of substitution from MBB to FBB.
243. Regarding similar findings referred to by Telenor in its letter of 10 December 2019, the Authority notes, as regards the first survey, that the questions are addressed to customers who did not have an MBB subscription.<sup>358</sup> They could not therefore provide up-to-date knowledge of the product, nor could they form a representative sample of the relevant customer group that could provide insight into switching patterns.<sup>359</sup> In such a case, the probative value of the evidence is limited. Moreover, the Authority disagrees with Telenor’s interpretation of the survey related to what Telenor refers to as “*churn-numbers*” from MBB.<sup>360</sup> In this context, as also explained in paragraph 237 above, the Authority considers that the survey referred to by Telenor does not provide information on churn numbers as such, but rather qualitative explanations for terminating an MBB subscription. This is also reflected in the numbers (percentages) reported by Telenor,

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<sup>354</sup> The percentage for 2010 can be found in paragraph 200 of Annex 13 to the Reply to the SO.

<sup>355</sup> See Reply to the LoF, page 8, first bullet point.

<sup>356</sup> That is, 61% of the 292 respondents who had FBB at home at the time of the survey. See page 13 of the 2008 survey (Annex 1 to the Reply to the SO). This question was not reported in the 2010 survey results, contained in Annex 2 to the Reply to the SO.

<sup>357</sup> See Document No 1097529, page 2 and 5, See also Document No 802035 (Annex 1 to the Reply to the SO), page 5, where it is stated that 55 % of the churned customers who used MBB as their primary access said that they did not use the MBB subscription as much as expected and Document No 802036 (Annex 2 to the Reply to the SO), page 3.

<sup>358</sup> See Document No 1097623, page 3.

<sup>359</sup> See Document No 1097623, page 26.

<sup>360</sup> See Document No 1097549, page 16.

which add up to more than 100%. This indicates that the respondent could give multiple answers when replying to the survey. In this context, this constitutes a methodological weakness which lowers the probative value of the documents.

244. The Authority considers that the survey results presented by Telenor do not contradict the Authority's conclusion that FBB and MBB services belong to separate relevant product markets.

#### 8.4.3.2.4.2 Use of FBB on mobile devices

245. As additional support for the claim that many consumers did not rely on MBB to cover their mobile data needs and that FBB was a substitute for MBB, Telenor relies on the following:<sup>361</sup>

- More than 80% of data consumption on mobile devices is consumed on FBB (Wi-Fi);
- The number of laptop PCs in Norway has consistently been far higher than the number of MBB subscriptions; and
- Since the global launch of the iPad in early 2010, tablets without a SIM card have consistently been more popular than models with a SIM card.<sup>362</sup>

246. The Authority considers that none of the points above is evidence of a material competitive constraint exerted by FBB on MBB.<sup>363</sup> Rather, they indicate that FBB services were still more prevalent (most likely because of practically unlimited data volumes, lower prices and higher and more reliable speeds<sup>364</sup>) than MBB. In addition, the points above in no way establish that customers requiring access to data services 'on the go' would have been able to satisfy their needs through FBB services during the Period under Consideration.

247. The Authority notes that in the *Telefónica Deutschland/E-Plus* Decision, the European Commission rejected arguments similar to the ones above. In that case, the notifying party argued that FBB exerted a strong competitive constraint on mobile data services and pointed to the fact that, on average, 64% of the data traffic on smartphones in Germany had been transmitted via home Wi-Fi.<sup>365</sup> The Commission noted, however, that the fact that the majority of data traffic on smartphones was transmitted via FBB (Wi-Fi) was because FBB services were still more powerful and cheaper than mobile services.<sup>366</sup> The Commission noted that as long as FBB services do not ensure uninterrupted

<sup>361</sup> Reply to the SO, paragraphs 103–108.

<sup>362</sup> In particular, Telenor notes that, in 2013, tablets without a SIM card accounted for more than 73% of all tablets sold in Norway (Reply to the SO, paragraph 107).

<sup>363</sup> As noted in the Section 8.4.3.2.3, the European Commission, most of the EEA NRAs, including Nkom, and the Norwegian NCA have all found that this constraint was limited.

<sup>364</sup> See the quote in paragraph 209 above. See also page 2 of BEREC, Report on Impact of Fixed-Mobile Substitution in Market Definition, BoR (12) 52 (see Document No 1075372), quoted in footnote 327 above.

<sup>365</sup> *Telefónica Deutschland/E-Plus* Decision, paragraph 63.

<sup>366</sup> *Telefónica Deutschland/E-Plus* Decision, paragraph 63.

coverage, they offer customers only a limited service in terms of time and location of their data usage and therefore cannot fulfil the same demand met by mobile services, not even to a significant extent. Therefore, the Commission considered that the competitive constraint arising from FBB services was still not material and concluded that FBB services were merely complementary to mobile broadband services and belonged to a separate market.<sup>367</sup>

248. Finally, Telenor refers to news articles from 2008 which discuss MBB as a substitute for FBB<sup>368</sup> and to an internal document of Telia, which indicates, in Telenor's view, that Telia considered MBB and FBB as substitutable, and reported that 49% of customers would cancel their FBB subscription if they had access to 4G (which is mobile data).<sup>369</sup>
249. The Authority notes that those articles and Telia's internal document do not address the relevant question in the current case, i.e. whether FBB was a good substitute for MBB (and not the other way around<sup>370</sup>).
250. For the same reason, Telenor's arguments<sup>371</sup> that Telia first introduced MBB in order to establish a direct alternative to Telenor's FBB offer and that ICE also introduced an MBB offer as a substitute to FBB are irrelevant.

#### 8.4.3.2.4.3 Quantitative assessment of the number of end users who viewed FBB as an alternative to MBB

251. Telenor argues further that the Authority has not assessed "*whether a sufficient number of consumers would have regarded FBB as an effective substitute to MBB, such that FBB would constrain (on its own or together with other constraints) a hypothetical monopolist of MBB from imposing a SSNIP.*"<sup>372</sup>
252. In this respect, it is worth recalling that the Authority has already demonstrated in this section that FBB and MBB should be considered as complementary (rather than substitutable) services.

<sup>367</sup> *Telefónica Deutschland/E-Plus* Decision, paragraphs 63 and 64.

<sup>368</sup> See Reply to the SO, paragraph 113, where Telenor refers to the following media articles: VG Technology, "*Fixed or Mobile Broadband?*" (the Authority's translation of: "*Fast eller mobil bredbånd?*"), 14 September 2008; see Annex 4 to the Reply to the SO (Document No 802038); Dagens Næringsliv, "*Mobile Broadband is the Cheapest*" (the Authority's translation of: "*Mobil bredbånd er billigst*"), 13 November 2008; see Annex 5 to the Reply to the SO (Document No 802039).

<sup>369</sup> Telia's internal document: *Mobile Broadband: Status, Churn and way forward*, undated, contained in Telia's reply of 27 January 2015 to the Authority's request for information of 12 December 2014 (Document No 743261, enclosure 5). In footnote 119 of Annex 13 to the Reply to the SO, Telenor comments that this internal Telia document states that one of Telia's goals was "*replacing ADSL with a fully competitive mobile solution*".

<sup>370</sup> As indicated in paragraph 193 and footnote 256 above, the question of whether MBB was a good substitute for FBB is not relevant for the purposes of this case, as MBB is the focal product which is being tested in this case.

<sup>371</sup> See Reply to the SSO, paragraphs 92 and 93.

<sup>372</sup> See, for example, paragraphs 197 and 200 of Annex 13 of the Reply to the SO.

253. The Authority recalls further that, contrary to what Telenor seems to contend, a “hypothetical monopolist test” (or SSNIP test) is not mandatory for the purpose of defining the relevant market (see paragraph 129 above).
254. As stated in the Notice on the definition of the relevant market, the Authority can use a range of evidence to define the relevant market, “*depending very much on the characteristics and specificity of the industry and products or services that are being examined*”.<sup>373</sup>
255. On this basis, the Authority considers that Telenor’s objection – that the Authority incorrectly defined the relevant market in this case because it failed to assess the number of end users who viewed FBB services as an alternative to stand-alone MBB – is unfounded.
256. To reiterate the Authority’s view, FBB was not an alternative to MBB for data usage ‘on the go’. In addition, for some of the customers that had MBB at home, FBB was simply not a perceived alternative. As the Commission found in its *Telefónica Deutschland/E-Plus* Decision,<sup>374</sup> as long as FBB services ensure no uninterrupted coverage, they offer customers only a limited service in terms of time and location of their data usage and therefore cannot fulfil the same demand fulfilled by mobile services.<sup>375</sup>

#### 8.4.3.2.4.4 Comparison with other Nordic countries

257. Telenor has raised a number of points in relation to the Authority’s comparison of Norway with other Nordic countries (see paragraphs 189 and 190 above).
258. Telenor notes that, according to the 2014 Nordic and Baltic Regulatory Report discussed in paragraphs 189 and 190 above, during most of the Period under Consideration, Norway was number three in terms of total broadband connections (FBB and MBB combined), close behind the leaders Sweden and Denmark.<sup>376</sup> Telenor also considers that, when comparing the relative development of FBB and MBB in the Nordic markets, it is evident that substitutability existed between FBB and MBB in Norway.<sup>377</sup>
259. Telenor observes that from 2007/2008, Norway had a much better development in FBB penetration compared to Finland and Sweden, but started to fall behind on MBB penetration. According to Telenor, as MBB matured, the development of FBB penetration in Sweden and Finland was dramatically reduced. Telenor considers that the substitutability between FBB and MBB must have led or contributed to a weak FBB

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<sup>373</sup> Notice on the definition of the relevant market, paragraph 25. See also judgment of 14 December 2005, *General Electric*, T-210/01, EU:T:2005:456, paragraph 519; judgment of 27 September 2012, *Shell Petroleum*, T-343/06, EU:T:2012:478, paragraph 171; judgment of 6 July 2010, *Ryanair*, T-342/07, EU:T:2010:280, paragraph 136; and judgment of 9 March 2015, *Deutsche Börse*, T-175/12, EU:T:2015:148, paragraph 133.

<sup>374</sup> See paragraph 247 above.

<sup>375</sup> *Telefónica Deutschland/E-Plus* Decision, paragraph 63.

<sup>376</sup> Telenor refers to Chart 3.1 and 3.2 at pages 19 and 20 of the 2014 Nordic and Baltic Regulatory Report.

<sup>377</sup> Reply to the SSO, paragraph 94.

development in Finland and Sweden. In Norway, according to Telenor, the excellent FBB solutions proved to be a better substitute for stand-alone MBB.

260. The Authority does not agree with Telenor's interpretation of the 2014 Nordic and Baltic Regulatory Report. The fact that FBB grew faster than MBB in Norway is not in contradiction with MBB being a distinct product market. As demonstrated by the Authority in Section 8.4.3.2 above, the evidence clearly shows that MBB and FBB were complementary services. It is therefore incorrect that FBB solutions were close substitutes to residential stand-alone MBB in the Norwegian market. The 2014 Nordic and Baltic Regulatory Report shows that for example in Denmark, MBB and FBB grew in parallel during the Period under Consideration.<sup>378</sup> As noted in paragraph 216 above, this was also the case in Norway during the Period under Consideration. In the Authority's view, this parallel evolution is consistent with the view that MBB and FBB were complementary products rather than substitutes.

#### 8.4.3.2.4.5 Public Wi-Fi (including semi-public Wi-Fi)

261. Telenor also submits that public Wi-Fi (including so-called semi-public Wi-Fi<sup>379</sup>) services might have constrained a hypothetical monopolist of stand-alone MBB. Specifically, Telenor argues that *"although wifi penetration in public places such as cafes and restaurants would have been growing and far from ubiquitous in 2010, for certain consumers, wifi in enough places in which they were expecting to want to use their large screen device outside of their homes (e.g. in their local café and hotels that they visited) would have represented a sufficient substitute for stand-alone MBB."*<sup>380</sup>
262. Telenor also refers to a consumer survey conducted from October until November 2011<sup>381</sup> and notes that "[i]n addition to accessing internet by mobile phones, the use of tablets was increasing from 2010 and onwards" and that it is interesting *"that almost as many say they use their tablets outside home via public Wi-Fi as respondents saying they use MBB"*.<sup>382</sup> In the Authority's view, this survey is irrelevant, as the results reported are from respondents with access to a tablet. These include customers with only a FBB subscription. The survey is therefore not limited to customers with MBB subscriptions as their primary or secondary subscription. Only the latter sample is relevant in order to assess whether such customers also use public Wi-Fi zones.
263. The Authority further observes that the existence of public or semi-public Wi-Fi is not mentioned as a reason for terminating a MBB subscription in any other relevant consumer surveys mentioned above. In the Authority's view, this is a clear indication

<sup>378</sup> This can be seen from a comparison of Chart 3.1 (at page 19 of the Report) and Chart 3.2 (at page 21) reproduced in paragraph 190 above.

<sup>379</sup> By semi-public Wi-Fi, Telenor means Wi-Fi in public places such as restaurants, pubs, hotels, etc.

<sup>380</sup> Annex 13 of the Reply to the SO, paragraph 220.

<sup>381</sup> Telenor refers to the following survey: *"BBTVU\_Q4\_2011.pptx"* (Document No 1097650).

<sup>382</sup> See Telenor's letter to the Authority of 10 December 2019 (see Document No 1103119), page 15.

that public and semi-public Wi-Fi were not considered as substitutes to stand-alone MBB during the Period under Consideration.

264. In the present case, to the best of the Authority's knowledge, no data recording the extent of the penetration of public Wi-Fi services in Norway in 2008 and subsequent years is available. However, the Authority refers in the following paragraphs to certain cases and findings of the European Commission. In these cases, the Commission concluded, in relation to the United Kingdom ("the UK") and Italy, that mobile communications services could not be substituted by public Wi-Fi services, given in particular the lack of nationwide coverage and of sufficient density, even in 2016. Given Norway's challenging geography and low population density, the Authority considers it unlikely that public Wi-Fi services would have been denser and/or had better coverage in Norway during the Period under Consideration than in the UK or Italy in more recent years.
265. The Authority notes that the European Commission found that, even in 2016, mobile communications services in the UK could not be substituted by public Wi-Fi services, given in particular the differences in terms of geographic coverage and quality.<sup>383</sup>
266. The Commission noted first that mobile network coverage was largely ubiquitous across the UK, but public Wi-Fi connectivity services were primarily focused on towns and city centres and even there the density of public Wi-Fi networks was not sufficient to enable them to be substitutable for mobile communications services.<sup>384</sup>
267. Moreover, according to the Commission, public Wi-Fi services were not comparable in terms of quality with mobile services. That was because public Wi-Fi services in the UK were provided over unlicensed spectrum, which everybody has the right to use and, therefore, congestion issues could not be controlled. In contrast, mobile services were provided over licensed spectrum, which meant that an MNO had much greater control over the quality of service.<sup>385</sup> For these reasons, the overwhelming majority of respondents to a Commission questionnaire stated that public Wi-Fi and mobile communications services should be considered as complementary.<sup>386</sup>
268. Finally, the Commission noted that public Wi-Fi services were still a very limited phenomenon compared to mobile services, in terms of volume of data. In particular, using data from the NRA, Ofcom, the Commission reported that, in June 2014, there were 44 million GB of data transferred on mobile networks in the UK, compared to 2.2 million GB on the public Wi-Fi networks (comprising around 42 000 hotspots).<sup>387</sup> Given these differences in terms of geographic coverage and quality, the Commission concluded that mobile communications services cannot be substituted by public Wi-Fi services. In fact,

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<sup>383</sup> Commission's Decision of 11 May 2016 in Case M.7612 – *Hutchison 3G UK/Telefonica UK*, in particular paragraph 253.

<sup>384</sup> *Ibidem*.

<sup>385</sup> *Ibidem*.

<sup>386</sup> *Ibidem*.

<sup>387</sup> *Ibidem*.

according to the Commission, public Wi-Fi and mobile communications services should be considered as complementary.<sup>388</sup>

269. The Authority notes further that the Commission reached the same conclusion, also in 2016, in a case concerning the Italian market.<sup>389</sup> In particular, the Commission noted that the density of public Wi-Fi networks in Italy at the relevant time was too limited to consider these services as a credible substitute to mobile communications services.<sup>390</sup>
270. These conclusions regarding the UK and Italian markets are consistent with a number of earlier Commission decisions, where the Commission concluded that Wi-Fi services did not constitute a substitute for mobile data transmission and observed that FBB services were complementary to mobile data services.<sup>391</sup>
271. In the present case, given Norway's challenging geography and the fact that it is relatively sparsely populated, the Authority agrees with the European Commission's reasoning that, as long as FBB services ensure no uninterrupted coverage, they offer end customers only a limited service in terms of time and location of their data usage and therefore cannot fulfil the 'on the go' demand met by mobile services.<sup>392</sup>
272. Moreover, public Wi-Fi services are often inferior to MBB services in terms of quality, and using public Wi-Fi hotspots entails a number of security and privacy risks to end

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<sup>388</sup> *Ibidem*.

<sup>389</sup> Commission's Decision of 1 September 2016 in Case M.7758 – *Hutchison 3G Italy/Wind/JV*.

<sup>390</sup> *Ibidem*, paragraph 127.

<sup>391</sup> See Commission Decision of 12 December 2012 in Case M.6497 – *Hutchison 3G Austria*, paragraphs 55–57; and *Telefónica Deutschland/E-Plus* Decision, paragraphs 60–64. The Commission referred to these cases in its Competition Merger Brief 1/2014 (*No magic number to dial – The Commission's review of mobile telecoms mergers* (see Document No 1075385), page 11), where it wrote that: "*Mobile operators sometimes argue that the relevant product market should be defined as including not only mobile telecommunications services but also fixed broadband services. Consumers can access these fixed broadband services with their smartphone or tablet via Wi-Fi spots in public places or at home. In the Austrian and German cases [M.6497 – Hutchison 3G Austria and M.7018 – Telefónica Deutschland/E-Plus], the Commission assessed this argument explicitly and concluded that, at present [2012 and 2014], fixed broadband is not an alternative for mobile telecommunications services. Mobile users may be using Wi-Fi spots frequently, but they also want their mobile device to function when they have no access to Wi-Fi spots. Hence, Wi-Fi acts as a complement, not as a substitute, to mobile telecommunications services.*" In paragraph 99 of its Reply to the SSO, Telenor notes that these cases and the Italian and UK case discussed above did not specifically consider "residential stand-alone MBB". This is correct. However, the reasons for considering that FBB services are not a valid substitute for mobile communications services (or mobile data services in general) are equally relevant when comparing FBB to residential stand-alone MBB.

<sup>392</sup> See *Telefónica Deutschland/E-Plus* Decision, paragraph 62, where the Commission noted that: "*In order to be a substitute to mobile broadband services, the Wi-fi services would need to provide smooth handover (so that the service is provided seamlessly when mobile), and nationwide coverage, to replicate that of the mobile network, which is not the case for the Wi-fi services that are currently available in Germany.*"

users.<sup>393</sup> It is also for these reasons that FBB was not an adequate substitute for MBB services during the Period under Consideration.

273. The Authority therefore considers Telenor's submission, that public Wi-Fi services were in the same relevant product market as stand-alone MBB services during the Period under Consideration, to be unfounded.

#### 8.4.3.2.5 Conclusion

274. In view of the above, the Authority concludes that, based on an assessment of demand-side substitution, FBB services were not in the same relevant product market as residential stand-alone MBB services during the Period under Consideration.

#### 8.4.3.3 Supply-side substitution

275. Given the different nature of the networks involved and the products supplied, the lack of availability of spectrum frequencies,<sup>394</sup> etc., the Authority does not consider it likely that suppliers of FBB services in the short term could or would have switched production to residential stand-alone MBB with the required immediacy and effectiveness, e.g. in the event of a change in relative prices. Telenor has not contested the absence of supply-side substitution during this investigation.

#### 8.4.3.4 Conclusion

276. Due to the insufficiency of demand-side substitution and the absence of supply-side substitution, the Authority concludes that FBB and residential stand-alone MBB services belonged to separate product markets during the Period under Consideration.

### 8.4.4 Were MTDS part of the same relevant market as residential stand-alone MBB services?

#### 8.4.4.1 Introduction

277. As noted Section 8.4.2 above, stand-alone MBB subscriptions were introduced in Norway in 2005. By marketing these services as "mobile" broadband (as opposed to "fixed" broadband), mobile communications providers emphasised the possibility for end users to access the internet from their computers, laptops, etc. (i.e. large-screen

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<sup>393</sup> See, for example, an extract from the *Europol* website in 2014 on "risks of using public Wi-Fi" (Document No 1115099) which shows that public Wi-Fi hotspots have been the target of alerts by public authorities regarding cybercrime.

<sup>394</sup> See paragraph 558 below.

devices<sup>395</sup>) even when they were not at a fixed location (for example, away from home or their workplace), i.e. ‘on the go’.<sup>396</sup>

278. Initially, MBB services were mainly used for web-browsing, e-mailing, and working with documents. Over time, they have also become suitable for more data-intensive tasks, such as streaming movies and playing online games.<sup>397</sup>
279. During the Period under Consideration, end users could not only access the internet via a stand-alone MBB subscription, but also, at least in principle, access the internet ‘on the go’ by making use of data allowances included in their mobile telephony subscriptions, i.e. MTDS (see Section 8.4.4.2.1.1 below).
280. Since data allowances included in mobile telephony subscriptions (i.e. MTDS) enabled users, at least in principle, to achieve the same functionality as stand-alone MBB subscriptions, the Authority will assess whether, during the Period under Consideration, such MTDS were in the same relevant market as residential stand-alone MBB services (the latter being the focal product in the present case). The Authority will first consider demand-side substitution (Section 8.4.4.2 below), then supply-side substitution (Section 8.4.4.3 below).

#### 8.4.4.2 Demand-side substitution

281. As demonstrated below, during the Period under Consideration there was insufficient demand-side substitution between MTDS and the focal product in the present case, i.e. residential stand-alone MBB services. Therefore, MTDS and residential stand-alone MBB services could not be considered as substitutes during the Period under Consideration. In order to reach this conclusion, the Authority has analysed product characteristics, intended and actual usage, and prices of the two services. It has also taken into consideration internal Telenor documentation, the views of certain Telenor competitors, and the decisional practices of Nkom, the Norwegian NCA and the European Commission.

##### 8.4.4.2.1 Product characteristics and usage

###### 8.4.4.2.1.1 Possible use of MTDS to access the internet

282. End users could – at least in principle – use MTDS, i.e. the data allowances included in their mobile telephony subscriptions, to access the internet ‘on the go’ in three ways: (i)

<sup>395</sup> In the case of MBB, for example, a dedicated SIM card can be placed into a separate external hardware component (i.e. a modem, such as a USB stick/“dongle” or a PC-card), which is then inserted in the large-screen device. If the large-screen device itself has an embedded modem (as can be the case with laptops and tablets), the dedicated SIM card can be placed directly into the large-screen device.

<sup>396</sup> See Telia’s press release of 28 February 2005 (Document No 1075347; available at: <<https://www.teliacompany.com/en/news/press-releases/2005/2/netcom-launches-the-most-comprehensive-3g-network-in-norway/>>, accessed June 2020): “When NetCom, wholly owned subsidiary of TeliaSonera, tomorrow launches its UMTS network (3G) in Norway, customers will be able to use PC laptops to read mail and surf the Internet – at any time and anywhere.”

<sup>397</sup> See paragraph 108 of the SO.

by accessing the internet directly on a mobile phone (in particular, a smartphone); (ii) on a large-screen device via tethering; or (iii) on a large-screen device using a ‘twin’ SIM card.

*Access directly from a smartphone*

283. As far as accessing the internet ‘on the go’ *directly from a smartphone* (for e-mails and web-browsing, in particular, as well as some video) is concerned, Telenor argues that this was *likely* to have been an alternative for *some* stand-alone MBB subscribers.<sup>398</sup>
284. However, even assuming that accessing the internet ‘on the go’ from a mobile phone (small-screen device) was an option during the Period under Consideration, the Authority finds that a number of factors, in practice, limited the use of this option during that period.
285. In particular, there were technological limitations with the mobile phones available on the market at the time, and many internet applications at the time were not “mobile-friendly” and could not be accessed in a meaningful way via a small-screen device.<sup>399</sup> For example, during the Period under Consideration, most mobile phones had limited web functionality. This was due to *inter alia* the small size of the screen, the inability to open multiple windows/tabs and difficulties when navigating websites, such as incompatibility with software and file formats, broken and compressed pages. A March 2008 market survey by Telenor shows that prices, speed, screen size, interface and a lack of overview over costs were factors that prevented end users from actively using MTDS.<sup>400</sup>
286. The Authority acknowledges that, over time, the introduction and increasing use of smartphones<sup>401</sup> mitigated many of these limitations and contributed to an increase in data consumption on mobile phones. This also coincided with a gradual transition to a more “mobile-friendly” online environment. However, the Authority disagrees with Telenor’s view that, due to the increased popularity of MTDS, the Authority’s arguments related to technological limitations are not (or are no longer) applicable.<sup>402</sup> In particular, the

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<sup>398</sup> Annex 13 to the Reply to the SO, paragraph 212.

<sup>399</sup> See Document No 1076584 (news articles on the use of mobile data).

<sup>400</sup> See Document No 657407 – CJO 104, an internal Telenor presentation called “*Struktur Small Screen*” of 16 June 2008, page 4/22. See also Document No 657407 – CJO 102, an internal Telenor memorandum of June 2008 where Telenor’s small-screen strategy is discussed and where, by way of background, reference is made to market research showing that high prices and uncertainty about prices constitute barriers for accessing the internet on mobile phones.

<sup>401</sup> Data consumption on mobile phones reached 30% of aggregate mobile data consumption in 2011; see Figure 2 above. At the end of 2011, 57% of internet users in Norway owned a smartphone. At page 6 of its 2011 Annual Report (available at: <<https://www.telenor.com/wp-content/uploads/2012/04/Annual-report-2011.pdf>>), accessed June 2020), Telenor reported that “*At the end of 2011, around 50% of Telenor’s customers were smartphone users.*”

<sup>402</sup> See Reply to the LoF, page 13 and 14.

Authority notes that only 5%, 12% and 17% of MBB customers often used their mobile phone to access the internet in 2009, 2010 and 2011 respectively.<sup>403</sup>

287. In any event, for the reasons explained in this Section 8.4.4.2, the Authority considers that the developments mentioned in the previous paragraph are not sufficient to conclude that MTDS exerted a material competitive constraint on stand-alone MBB subscriptions already before the end of 2012, such that MTDS could be viewed as part of the same relevant product market. One of the main reasons is that, when accessing the internet directly on a smartphone, the pricing and data allowances for MTDS would still have been applicable. As shown in Section 8.4.4.2.2 below, these services were significantly more expensive than MBB services during the Period under Consideration.

### *Tethering*

288. As far as *tethering* is concerned, this involves a procedure which “converts” a mobile phone into a broadband modem and connects it to a large-screen device, for example a laptop or netbook.<sup>404</sup> In principle, end users could use tethering via their mobile telephony subscriptions to access the internet ‘on the go’ as from 2006<sup>405</sup> and throughout the Period under Consideration.
289. However, at the beginning of the Period under Consideration, smartphone penetration in Norway was still limited<sup>406</sup> and not all mobile phones could be used for tethering.<sup>407</sup> In addition, tethering appears to have been a more cumbersome method to connect than using a SIM card or a dongle directly on a laptop.<sup>408</sup>
290. Telenor argues that a large proportion of smartphones allowed for tethering even in 2008 and that Telenor allowed for tethering already in 2007.<sup>409</sup> Moreover, regarding whether tethering was more cumbersome, Telenor states that connecting a laptop to the internet via a dongle required the download of software that was not always straightforward, and that the process was not necessarily always smooth or smoother than tethering. Telenor

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<sup>403</sup> See Document No 1097607, page 16 and Document No 1097608, page 13.

<sup>404</sup> Unlike for MBB services, there is no need for a dedicated SIM card, because consumers use the data allowance included in their mobile telephony subscription.

<sup>405</sup> I.e. when providers of mobile communications services in Norway started including data allowances in their traditional mobile telephony offerings (which, until then, had only included various combinations of voice and SMS services).

<sup>406</sup> See Document No 758037, the report *mediefakta* 1/2013, pages 11-12.

<sup>407</sup> For example, the iPhone did not include the option to tether the iPhone to a laptop or another large-screen device until June 2009, when the Apple iPhone OS3 upgrade was released.

<sup>408</sup> The Authority understands that tethering was a process which the user was required to carry out each time the user wished to access the internet via this medium, compared with a method which needed to be activated only once.

<sup>409</sup> See paragraphs 205 and 208 of Annex 13 to the Reply to the SO. In the Reply to the SSO, Telenor states that tethering was technically available and practical from at least 2008 (see paragraphs 113, 114 and 119).

argues further that tethering was *likely* to have been a good alternative for a large proportion of stand-alone MBB subscribers *at least by 2011*.<sup>410</sup>

291. In any event, irrespective of how large the proportion of smartphones that allowed for tethering was during the Period under Consideration and how cumbersome tethering was, a consumer survey conducted in 2011 on behalf of Telenor shows that tethering was not a very popular option during the Period under Consideration. According to this survey from 2011, only 4% of Telenor’s MBB customers in the residential market used a mobile phone as a modem:

Table 7: What kind of modem do you use for mobile broadband?<sup>411</sup>

USB modem <sup>412</sup>	69%
Built-in modem <sup>413</sup>	12%
Wireless router <sup>414</sup>	14%
Mobile phone <sup>415</sup>	4%
Don’t know <sup>416</sup>	5%

292. A similar pattern was found in an earlier survey,<sup>417</sup> which shows that 6–11% of the respondents used a mobile phone as a modem and 9–13% of the respondents replied that they would prefer to use the mobile phone as a modem.<sup>418</sup>

<sup>410</sup> Annex 13 to the Reply to the SO, paragraph 212.

<sup>411</sup> See “Usage Index Mobile Broadband” (translation by the Authority of: “Bruksindeks Mobilt Bredbånd”; see Document No 1097608), page 74; translation by the Authority of the following extract: “Hva slags modem bruker du for mobilt bredbånd?”

<sup>412</sup> Translation by the Authority of the following extract: “USB-modem”.

<sup>413</sup> Translation by the Authority of the following extract: “Innebygget modem”.

<sup>414</sup> Translation by the Authority of the following extract: “Trådløs ruter”.

<sup>415</sup> Translation by the Authority of the following extract: “Mobiltelefon”.

<sup>416</sup> Translation by the Authority of the following extract: “Vet ikke”.

<sup>417</sup> The survey is not dated (the interview period was from 19 March to 27 March, but the year is not specified). However, according to Telenor “several factors indicate that it is conducted prior to 2010” (see Reply to the LoF, footnote 85).

<sup>418</sup> As can be seen from Table 8 below, the use of a mobile phone as a modem was the highest in the age groups from 20 to 30 years. However, as illustrated in Table 4 at paragraph 185 above, this was Telenor’s smallest MBB customer group. In any event, the use of a mobile phone as a modem was also limited in that age group (11%).

**Table 8: Which solution for use of modem have you chosen when using mobile broadband? And which one/ones would you prefer?**<sup>419</sup>

	Current modem <sup>420</sup>		Preferred (modem) <sup>421</sup>	
	20–30 years %	31–50 years %	20–30 years %	31–50 years %
USB modem, can be used on different PCs <sup>422</sup>	73	63	43	36
Integrated in PC, modem always included <sup>423</sup>	16	26	48	48
Modem w/WLAN, sharing the internet <sup>424</sup>	4	16	18	25
Mobile phone as modem <sup>425</sup>	11	6	13	9
Don't know <sup>426</sup>	5	2	7	10

293. The Authority observes further that in internal correspondence as late as December 2012, Telenor was still considering that tethering *would* lead to prices of data for small screens and large screens converging *in the future*.<sup>427</sup> In the Authority's view, this indicates that, at least until the end of 2012, using tethering to exploit the data allowances included in mobile telephony subscriptions (MTDS) could not be considered an effective substitute for stand-alone MBB subscriptions.

294. The Authority finally notes that, irrespective of when exactly tethering was possible and how cumbersome it was, the pricing and data allowances for MTDS would still have

<sup>419</sup> Document entitled "Needs and drivers of Mobile Broadband" (translation by the Authority of: "Behov og drivere mobilt bredbånd"; see Document No 1097581), page 40; translation by the Authority of the following extract: "Hvilken modem-løsning har du når du bruker mobilt bredbånd? Og hvilken/hvilke ville du ha foretrukket?"

<sup>420</sup> Translation by the Authority of the following extract: "Modem har idag".

<sup>421</sup> Translation by the Authority of the following term: "Foretrukket".

<sup>422</sup> Translation by the Authority of the following extract: "USB-modem, kan brukes på ulike PC'er".

<sup>423</sup> Translation by the Authority of the following extract: "Integrert i PC, modem alltid med".

<sup>424</sup> Translation by the Authority of the following extract: "Modem m/WLAN, dele Internett".

<sup>425</sup> Translation by the Authority of the following extract: "Mob. tlf. som modem".

<sup>426</sup> Translation by the Authority of the following extract: "Vet ikke".

<sup>427</sup> Document No 658362 – EES 90. In an internal e-mail dated 13 November 2012, an article dated 12 November 2012 about tethering was distributed. A staff member of Telenor commented that tethering could eventually lead to convergence of prices between large-screen and small-screen data.

applied to any tethered access to the internet.<sup>428</sup> As shown in Section 8.4.4.2.2 below, the pricing for MTDS services was significantly more expensive than for residential MBB services during the Period under Consideration.

#### *Twin-SIM*

295. The third way end users could use MTDS included in their mobile telephony subscriptions to access the internet ‘on the go’ was by buying a separate (additional) data-only SIM card, for use on large screens. This was, however, only possible during the second part of the Period under Consideration. These *twin SIM cards* were first introduced in Norway by Telia in July 2010.<sup>429</sup> The additional data-only SIM card enabled mobile telephony subscribers to split the data allowance included in their mobile telephony subscriptions between the mobile phone (small-screen device) and a large-screen device, so that in principle the customer only needed one mobile subscription. Telenor offered the possibility to buy additional data-only SIM cards to its residential customers only as from December 2011.<sup>430</sup> The Authority notes that, also in this scenario, the significantly more expensive pricing for MTDS (see Section 8.4.4.2.2 below) would still have applied. As a result, this option did not exert a competitive constraint on residential stand-alone MBB during the (limited) part of the Period under Consideration when it was available.

#### 8.4.4.2.1.2 Usage and intended use

296. The Authority notes further that, during the Period under Consideration, there were clear differences in actual and intended use between stand-alone MBB services and MTDS.
297. The average monthly amount of data consumed with a stand-alone MBB subscription was significantly higher than with a mobile telephony subscription and this difference increased during the Period under Consideration, as shown in Figure 5 below. This further indicates that stand-alone MBB subscriptions and MTDS satisfied different customer needs during the Period under Consideration (i.e. more occasional and less data-intensive needs in the case of MTDS).

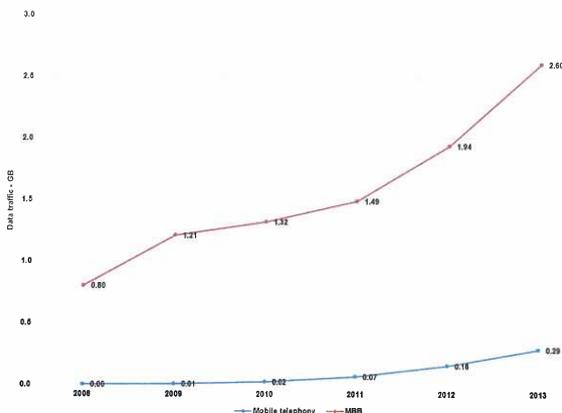
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<sup>428</sup> Telenor’s argument that it offered its subscribers the possibility to either buy a stand-alone MBB plan or add the exact same data allowance at the exact same price on to their mobile telephony subscription will be discussed in Section 8.4.4.2.6.2 below.

<sup>429</sup> See Document No 758032, extract from Telia’s Twitter account of 7 July 2010, introducing twin SIM cards for its *iTalk* and *iConnect* subscriptions.

<sup>430</sup> See Document No 758031, extract from Telenor’s Facebook page of 7 December 2011; see also Annex 13 to the Reply to the SO, paragraph 218.

Figure 5: Average data traffic (per subscription per month) – MBB and MTDS<sup>431</sup>, 2008–2013



Source: *The Norwegian e-com market, 2015*.<sup>432</sup>

298. That residential stand-alone MBB subscriptions and MTDS satisfied different customer needs during the Period under Consideration can also be inferred from the fact that MBB customers generally purchased subscriptions with more data included than they actually consumed,<sup>433</sup> expecting to use MBB for data-intensive tasks. In contrast, most mobile telephony subscriptions did not include sufficient amounts of data to satisfy this need.<sup>434</sup> This difference in usage pattern has been confirmed by Telia, which states: “*while mobile telephony data services were originally introduced for low data-intensive tasks, so was MBB subscriptions meant for more data-intensive tasks. In this sense, there is a*

<sup>431</sup> Referred to as “Mobile telephony” in the below figure.

<sup>432</sup> See Figure 1, Figure 5 and Figure 28 of Nkom’s report regarding the Norwegian e-com market 2015 and underlying data (“Tallsammendrag for ekommarkedet 2015”, tab ‘mobiltjenester’), both available at: <<https://ekomstatistikken.nkom.no/#/download>>, accessed June 2020.

<sup>433</sup> See, for instance, Document No 658362 – EES 94, page 1/6, internal Telenor correspondence of 30 November 2012 on MBB data consumption per subscription. See also Document No 658759 – RWI 34, page 2/2 where the same overview with margins included is shown.

<sup>434</sup> See Document No 758029, comparison of mobile data prices of 17 November 2009 by the website Tek.no (available at: <<https://www.tek.no/nyheter/nyhet/i/awygB4/best-pris-pa-mobilt-internet>>, accessed June 2020). Telenor argues (see Annex 13 to the Reply to the SO, paragraph 211) that the differences in average consumption of data and included data allowances between stand-alone MBB plans and mobile telephony plans are not relevant when defining the relevant product market in this case. The Authority disagrees and considers that this is evidence that the two services (stand-alone MBB and MTDS) were used for different purposes and therefore were not viewed as interchangeable by end users.

*significant difference in the usage pattern between MBB customers and customers that use data in voice bundle.*<sup>435</sup>

299. Further, the Authority observes that, as shown in Figure 2 in paragraph 187 above, data traffic via mobile telephony services (MTDS) did not overtake traffic via stand-alone MBB subscriptions until 2013, and that, until 2010, the share of traffic via mobile telephony services was small (no more than 15% in 2010).
300. The Authority considers that its view that stand-alone MBB services and MTDS were in separate markets until at least the end of 2012 (which is supported by the data presented in Figure 2 and Figure 5 above) is consistent with the timing of a pivotal change in the pricing structure of mobile communications services in Norway, which took place in early 2013. Specifically, prompted by the increased penetration of smartphones in Norway,<sup>436</sup> at the beginning of 2013 Telia introduced mobile telephony subscriptions where the customer only paid for data consumption, with voice minutes and SMS services included in the subscription at no additional charge. Telenor followed suit in June 2013.<sup>437</sup>
301. This change in the pricing structure of mobile communications services likely encouraged end users to use data on their smartphones and contributed to MTDS overtaking traffic generated by stand-alone MBB subscriptions in 2013, as shown in Figure 2 above.
302. In other words, the fact that, starting from early 2013, end users only paid for their data (MTDS) consumption (with voice and SMS services included for free) on their small-screen devices likely encouraged substitution away from stand-alone MBB subscriptions. The Authority, however, considers that it cannot be said that this process was significantly underway prior to the change in pricing structure, i.e. before at least the end of 2012, as discussed in this Section 8.4.4.2.<sup>438</sup>
303. Finally, the Authority refers to internal Telenor documents, which indicate that MBB customers considered MBB and MTDS to be complementary products rather than substitutes during the Period under Consideration, for example:

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<sup>435</sup> See Telia's letter to the Authority of 30 August 2016, Document No 1075917, Section 2.2, page 5.

<sup>436</sup> Smartphone penetration in Norway only reached significant levels during 2011–2012, with 57% of internet users in Norway owning smartphones at the end of 2011. At the end of 2012, smartphone penetration had increased to 68% of internet users in Norway. See Document No 758037, the report *mediefakta 1/2013* on page 11. At page 6 of its 2011 Annual Report, Telenor reported that “*At the end of 2011, around 50% of Telenor's customers were smartphone users.*” See footnote 401 above.

<sup>437</sup> See Telenor's press release: “*Telenor starter sommeren med enda bedre mobilpakker*” (available at <<https://www.telenor.com/no/pressemelding/telenor-starter-sommeren-med-enda-bedre-mobilpakker>>, accessed June 2020); the Authority's translation: “*Telenor starts the summer with even better mobile packages*”.

<sup>438</sup> In this respect, a noticeable difference in the prices per MB between stand-alone MBB subscriptions and MTDS remained at least until January 2015 (see footnote 451 below). See also the findings of Nkom in 2016, when it concluded that stand-alone MBB subscriptions and MTDS were in separate markets (see paragraph 320 below).

- (i) A document from 2009, entitled “*Usage Index Mobile Broadband*”,<sup>439</sup> states that 20% of the MBB customers use the mobile phone to access the internet “*from time to time*”, while 78% state that they don’t use the mobile phone to access the internet;<sup>440</sup>
- (ii) A document from 2010, entitled “*Usage Index Mobile Broadband*”,<sup>441</sup> states “*Frequent use of internet on mobile phones is doubled, however still not a relevant option for most customers. Day&Night customers are the most eager users of internet on the mobile phone (21% surfs often). Therefore, it seems like this [using internet via a mobile phone] and MBB provisionally are complementary services rather than substitutes.*”;<sup>442</sup>
- (iii) A document from 2011, entitled “*Usage Index Mobile Broadband*”,<sup>443</sup> states “*Further increase in frequent use of internet on mobile phone, however still not an option for a majority of the customers. The growth is within the group of young customers. [...]. It is still the case that the most frequent MBB users also use their mobile phone more to surf the internet, in other words the mobile phone is not replacing MBB for those who choose to purchase both services.*”;<sup>444</sup>
- (iv) A document from 2010, entitled “*Needs and drivers of Mobile Broadband*”,<sup>445</sup> states: “*The customer group 20-30 years has a greater demand for mobile internet access. However, within this group there is a significantly lower share of MBB users and fewer that are close to purchasing MBB. A part of this gap is covered by internet on the mobile phone and wireless zones. However, this usage is often a supplement to MBB and not a replacement.*”;<sup>446</sup> and
- (v) A document from 2010, entitled “*Churned private customers on mobile broadband*”,<sup>447</sup> states: “*Questions and answers: Do we lose many mobile*

<sup>439</sup> Translation by the Authority of: “*Bruksindeks Mobilt Bredbånd*”.

<sup>440</sup> See Document No 1097606, page 54.

<sup>441</sup> Translation by the Authority of: “*Bruksindeks Mobilt Bredbånd*”.

<sup>442</sup> See Document No 1097607, page 16; translation by the Authority of the following extract: “*Dobling for hyppig bruk av Internett på mobil, men fortsatt lite aktuelt for flertallet. Dag&Natt-kundene er mest ivrige på Internett på mobilen (21% surfer ofte). Det ser derfor ut som om dette og MBB foreløpig supplerer hverandre mer enn det erstatter hverandre.*”

<sup>443</sup> Translation by the Authority of: “*Bruksindeks Mobilt Bredbånd*”.

<sup>444</sup> See Document No 1097608, page 13; translation by the Authority of the following extract: “*Videre økning av hyppig bruk av Internett på mobil, men fortsatt uaktuelt for flertallet. Veksten skjer blant de unge. Det er fortsatt slik at de som bruker MBB oftest også surfer mer på Internett med mobilen, altså er ikke mobilen en erstatning for MBB blant de som har valgt å ha begge deler*”.

<sup>445</sup> Translation by the Authority of: “*Behov og drivere mobilt bredbånd*”.

<sup>446</sup> Document No 1097581 (see Telenor’s reply of 15 November 2019 to the Authority’s request for information of 7 November 2019), page 4; translation by the Authority of the following extract: “*Gruppen 20-30 år har større behov for mobil Internett-tilgang, men har klart lavere andel brukere av mobilt bredbånd og færre som er nærmest kjøp. Deler av dette gapet dekkes inn av Internett på mobiltelefon og trådløse soner. Denne bruken er imidlertid ofte supplement til MBB og ikke erstatning*”.

<sup>447</sup> Translation by the Authority of: “*Churnede privat-kunder på mobilt bredbånd*”.

*broadband customers due to the fact that more and more customers have mobile phones that facilitate usage of small screen internet? No, only a small minority mentions this as a reason for churning.*<sup>448</sup>

304. In relation to the third document (see point (iii) in paragraph 303 above), Telenor claims that the fact that the small share of younger customers that had MBB also used MTDS is of little relevance. The Authority disagrees. The evidence presented above shows that those customers who did use MTDS considered it to be a supplement and not a substitute to MBB. In order to assess substitutability between MBB and MTDS, it is mainly relevant to take into consideration the customer group that could provide insight into switching patterns. Contrary to what Telenor claims, any general insights from customers that had not purchased MBB have lower probative value. In this context, the Authority considers Telenor's observations, that page 26 of this document labels small-screen internet access as a "*substitute*" to MBB, to be less relevant, as the respondents are customers that did not purchase MBB.

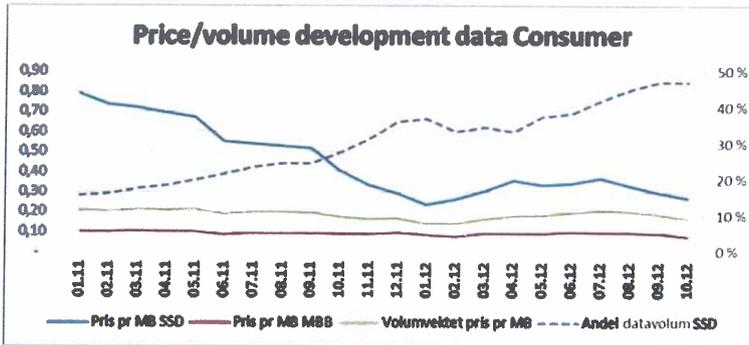
#### 8.4.4.2.2 Prices

305. The Authority finds further that significant differences in unit prices (i.e. prices per megabyte ("MB") of data) existed during the Period under Consideration between residential MTDS and stand-alone MBB services. This can *inter alia* be seen from Figure 6 below, which relates to the later part of this period.

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<sup>448</sup> Document No 1097540 (see Telenor's reply of 15 November 2019 to the Authority's request for information of 7 November 2019), page 4; translation by the Authority of the following extract: "*Spørsmål og svar... Mister vi mange mobilbredbåndskunder fordi stadig fler har bedre mobiltelefoner tilrettelagt for small screen internet? Nei, kun et lite mindre tall nevner dette som churnårsak*". See footnote 339 above for an explanation of the term "churn" or "churning".

Figure 6: Price and volume trends for Telenor's residential MTDS<sup>449</sup> and MBB services, 2011–2012



Source: Telenor internal e-mail.<sup>450</sup>

306. In particular, the figure above shows that, in January 2011, Telenor's average prices per MB on small-screen devices (referred to in the figure as "SSD"), such as mobile phones, for residential customers were eight times higher than MBB prices. In October 2012, prices on small-screen devices were still as much as three times higher than MBB prices. Other documentation shows that, even as late as in January 2015, a noticeable difference between prices per MB in residential MBB subscriptions and MTDS remained.<sup>451</sup>
307. The price difference is also reflected in the prices of individual subscriptions. With very few exceptions, prices per MB of MTDS included in ordinary mobile telephony subscriptions were far higher than the prices per MB included in MBB subscriptions between 2008 and 2012.<sup>452</sup>
308. The existence of these significant price differences between 2008 and 2012 is a clear indication that residential stand-alone MBB subscriptions and MTDS belonged to different relevant markets during this period. If end users viewed the two services as

<sup>449</sup> Referred to as "SSD" in the below figure.

<sup>450</sup> Page 2 of document No 658362 – EES 98, an internal e-mail of 29 November 2012 from a Telenor staff member to Telenor's wholesale, retail and strategy departments. The prices ("Pris") concern average prices for residential customers of Telenor, including its brands Djuice and Talkmore. "SSD" stands for "small-screen device", such as a smartphone; "pris pr MB" means "price per MB"; "Volumvektet pris pr MB" means "volume weighted price per MB" and "Andel datavolum SSD" stands for "percentage of data volume small-screen device".

<sup>451</sup> See Document No 758035, extract from Telenor's webpage of 22 January 2015. Telenor's best-selling MBB subscription included 10 GB data and cost NOK 299. A mobile telephony subscription with the same amount of data (*Mobil XL*) cost NOK 599. With Telia, 5 GB on an MBB subscription cost 179 per month, while 3 GB of data on a telephony subscription cost NOK 299 per month (in addition, the nominal speed was also much higher on the MBB subscription), see Document No 758033, extract from Telia's webpage of 22 January 2015.

<sup>452</sup> Document No 758029, comparison of mobile data prices of 17 November 2009 by the web site Tek.no. See also Document No 758038, extract from Telenor's web page of 12 July 2011 on its MBB offerings, compared with its mobile telephony offerings in Document No 758028, article from Tek.no of 24 March 2011.

effectively interchangeable, one would have expected a convergence in prices already before the end of 2012.

309. The Authority recalls that, irrespective of precisely when tethering and twin SIM cards became technically/commercially available during the Period under Consideration, the prices for MTDS nonetheless applied to both options, thus rendering them significantly more expensive than MBB throughout that period. This would also have been the case for the use of MTDS directly on a smartphone.
310. The Authority finally refers to an internal Telenor memorandum of June 2008, where Telenor's small-screen strategy is discussed and where, by way of background, reference is made to market research showing that high prices and uncertainty about prices constitute barriers for accessing the internet on mobile phones.<sup>453</sup>

#### 8.4.4.2.3 *Telenor's internal documents*

311. The Authority's view that residential stand-alone MBB services and MTDS were in separate markets during the period from 2008 to at least the end of 2012 is consistent with the views expressed by Telenor in a number of internal documents.
312. For example, still even in December 2011, Telenor considered that data-only SIM cards (twin SIM cards) together with large small-screen data packages could – *in the future* – become a good substitute for its MBB offerings. Accordingly, Telenor considered introducing speed limits in its small-screen data offerings, in order to protect the MBB product and thus maintain a difference between the two products (small-screen data (MTDS) packages and MBB).<sup>454</sup>
313. Further, as late as November 2012, Telenor was debating whether prices for MBB could still be decided in isolation from prices for small-screen MTDS, given the rapid increase of small-screen data consumption from 2011 onwards – an increase which was considered likely to continue in the future.<sup>455</sup> In other words, even at this time Telenor appears to have considered MTDS to be a prospective rather than a current competitive constraint.
314. These internal discussions of December 2011 and November 2012 are consistent with earlier Telenor documents. A market survey by Telenor of March 2008 showed that prices, speed, screen size, interface and a lack of overview over costs were factors that prevented end users from actively using MTDS.<sup>456</sup> In November 2009, Telenor's CEO commented internally on Telenor's draft reply to Nkom's public consultation on Market

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<sup>453</sup> See Document No 657407 – CJO 102.

<sup>454</sup> See Document No 757462, internal Telenor presentation of 6 December 2011 from the Brands & Marketing Division entitled "*Implementering av hastighetsklasser också på Small Screen*"; translation by the Authority: "*Introduction of speed classes [limites] also on Small Screen*".

<sup>455</sup> See Document No 658873 – CJO 63, page 4/9.

<sup>456</sup> See footnote 400 above.

15 and wrote that MBB (large-screen) services must be considered as a separate market from small-screen mobile data (MTDS) and as a complementary product to FBB.<sup>457</sup>

#### 8.4.4.2.4 Views of Telenor's competitors

315. The Authority considers that, contrary to Telenor's view,<sup>458</sup> statements provided by a number of Telenor's competitors<sup>459</sup> also support the conclusion that residential stand-alone MBB services and MTDS belonged to separate markets during the Period under Consideration. In particular, Telenor's competitors suggest that the two services were complementary rather than substitutes.
316. For example, Ventelo states "*Ventelo did consider and still considers MBB services to be a supplement to ordinary mobile services: a separate subscription which covered a special need*".<sup>460</sup>
317. Likewise, according to Phonero, "*MBB is a natural supplement*" to the sale of mobile telephony.<sup>461</sup>
318. Telia also considers that MBB (sold to residential customers) constituted a separate market, excluding the "voice bundle (i.e. voice, SMS and mobile data (MTDS) combined

<sup>457</sup> See Document No 658338 – EES 71: "*As regards big screen/mobile broadband, this is per today a complementary product to fixed broadband, and must in my opinion be viewed as separate from a general data services market on mobile infrastructure. The technological development (primarily the implementation of HSDP+ and LTE) will make mobile broadband a substitute for fixed broadband over time for customers with a limited or medium bandwidth need. It is my opinion that this market [i.e. MBB] must be viewed separately from both small screen data and the general wholesale mobile telecoms market, as I cannot see that mobile broadband in this sense is a must to sell mobile services for use via handsets. The closeness to the competitive dynamics of the fixed broadband market underlines this.*"; emphasis added, translation by the Authority of the following extract: "*Når det gjelder stor skjerm/mobilt bredbånd er dette per i dag et komplementært produkt til fast bredbånd, og må mener jeg sees på adskilt fra et generelt datatjenestemarked på mobil infrastruktur. Den teknologiske utviklingen (primært innføring av HSDP+ og LTE) vil gjøre mobilt bredbånd til et substitutt for fast bredbånd over tid for kunder med et begrenset/midlere båndbreddebehov. Jeg mener at dette markedet må sees adskilt fra både small screen data og det generelle grossist mobil talemarkedet, da jeg ikke kan se at mobilt bredbånd i denne betydningen er et "must" for å selge mobiljenester til bruk via håndsett. Nærheten til konkurranseynamikken i fast bredbåndsmarkedet understreker dette.*"

<sup>458</sup> See Annex 13 of the Reply to the SO, paragraphs 77–78 and the Reply to the SSO, paragraph 120 (pages 28–30).

<sup>459</sup> The Authority recognises that two of Telenor's competitors, TDC and Hello, stated (see paragraph 77 of Annex 13 of the Reply to the SO) that they sold MBB as part of a package together with other mobile communications services, such as voice. However, as confirmed by Telenor (see paragraphs 420 and 426 of the Reply to the SO), during the Period under Consideration these competitors focused only (in the case of TDC) or primarily (in the case of Hello) on business customers where such packages were the norm. Given that the Authority's focal product is residential stand-alone MBB, this is not relevant here.

<sup>460</sup> See Ventelo's reply of 16 May 2014 to the Authority's request for information (non-confidential version: see Document No 783134), in particular its response to Question 3.3; translation by the Authority of the following extract: "*Ventelo anså og anser fortsatt MBB tjenester for å være et supplement til vanlige mobiljenester, et eget abonnement som dekket et spesielt behov*"; also reported at paragraph 77 of Annex 13 to the Reply to the SO.

<sup>461</sup> See Phonero's reply of 5 May 2014 to the Authority's request for information (non-confidential version: see Document No 708039), response to Question 3.5; translation by the Authority of the following extract: "*MBB er et naturlig supplement til mobiltelefon*"; also reported at paragraph 77 of Annex 13 to the Reply to the SO.

in one subscription)”.<sup>462</sup> It notes that “*from a demand side perspective, the customers ordered voice bundle and MBB separately during the relevant time period*”<sup>463</sup> (i.e. the Period under Consideration, since in its letter Telia is commenting on the SO). It further considers that “*while mobile telephony data services were originally introduced for low data-intensive tasks, so was MBB subscriptions meant for more data-intensive tasks. In this sense, there is a significant difference in the usage pattern between MBB customers and customers that use data in voice bundle.*”<sup>464</sup>

#### 8.4.4.2.5 *Decisional practice of Nkom, the Norwegian NCA and the European Commission*

319. In its 2010 Market Analysis, Nkom found it “*impractical to distinguish between mobile broadband subscriptions sold as a freestanding product and mobile data traffic sold bundled with voice and SMS with respect to definition of the product market*” and noted that “*convergence can be expected between pure mobile broadband and other mobile data traffic*”.<sup>465</sup>
320. However, in its 2016 Market Analysis, Nkom considered that stand-alone MBB subscriptions and traditional mobile subscriptions consisting of voice, SMS and mobile data (MTDS) were in separate markets.<sup>466</sup> Notably, Nkom analysed the differences in consumption patterns between MBB and MTDS and considered that this supported the conclusion that “*mobile broadband and data services based on ordinary mobile subscriptions meets [sic] different needs from end users. The [data traffic] trends also indicate a certain degree of increasing substitution from mobile broadband to ordinary mobile subscriptions. This suggests that the supply of ordinary mobile subscriptions has a disciplining effect on mobile broadband in the next years. At the same time there are still differences in product characteristics and use that entails that the products cannot be considered to be substitutes during the timeframe of the analysis.*”<sup>467</sup>
321. In 2015, the Norwegian NCA also considered whether MBB services constituted a separate market (although it did not find it necessary to conclude on the matter).<sup>468</sup> It observed that MBB services are offered and demanded as a separate stand-alone product, which is used through its own SIM card or dongle for use on tablets and laptops. According to the Norwegian NCA, therefore, from a demand-side perspective, MBB services used on tablets and laptops differ from data services used on mobile phones.<sup>469</sup>

<sup>462</sup> See Telia’s letter to the Authority of 30 August 2016, Document No 1075917, Section 2.2, page 3.

<sup>463</sup> See Telia’s letter to the Authority of 30 August 2016, Document No 1075917, Section 2.2, page 3.

<sup>464</sup> See Telia’s letter to the Authority of 30 August 2016, Document No 1075917, Section 2.2, page 5.

<sup>465</sup> Paragraph 63 of Nkom’s 2010 Market Analysis.

<sup>466</sup> Paragraph 94 of Nkom’s 2016 Market Analysis.

<sup>467</sup> Paragraph 109 of Nkom’s 2016 Market Analysis.

<sup>468</sup> See the Norwegian NCA’s Merger Decision V2015-1, paragraphs 117–121.

<sup>469</sup> See the Norwegian NCA’s Merger Decision V2015-1, paragraph 117.

322. This is in line with the findings of the European Commission, which also considered the issue of demand-side substitution between stand-alone MBB services and MTDS.
323. For example, in 2012 the European Commission examined whether: a) voice and mobile broadband over voice-enabled devices; and b) mobile broadband over data-only devices (such as dongles, tablets and 3G/4G mobile routers) belonged to the same market in Case COMP/M.6497 – *Hutchison 3G Austria/Orange Austria*. The Commission considered that, from a demand-side perspective, services designed for use on a voice-enabled device should be distinguished from services designed for use on a data-only device.<sup>470</sup>

#### 8.4.4.2.6 Consideration of Telenor's arguments

##### 8.4.4.2.6.1 Introduction

324. Telenor contests the Authority's view that, until at least the end of 2012, residential stand-alone MBB and MTDS belonged to separate markets.
325. The Authority observes, however, that a number of statements in Telenor's Reply to the SO appear to accept that the convergence between MTDS and stand-alone MBB was limited, or at least more limited, until the second half of 2010. For example, Telenor states that "*The SO has also understated the constraints from data in telephony plans, bundles of telephony and MBB and wifi, certainly from the end of 2010 until the end of 2012. [...] Arguably the relevant retail market was broader including not only stand-alone MBB, but also data within telephony plans, bundles, wifi and FBB from the end of 2010 (if not earlier) rather than only from 2013 as the SO concludes.*"<sup>471</sup>
326. The Authority interprets these statements as indicating that, in respect of demand-side substitution, Telenor appears to disagree with the Authority mainly as far as the second part of the Period under Consideration is concerned, i.e. the period from July 2010 or

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<sup>470</sup> Commission Decision of 12 December 2012 in Case M.6497 – *Hutchison 3G Austria/Orange Austria*, paragraph 52: "*It follows that, from a demand perspective, services designed for use on a voice-enabled device are distinguished from services designed for use on a data-only device.*" The Commission went on to find that, due to supply-side considerations, it was not appropriate to depart from its previous practice of defining a single market including all services provided whether for data-only devices or for voice-enabled devices. For a similar conclusion, see paragraph 147 of the Commission's Decision of 28 May 2014 in Case COMP/M.6992 – *Hutchison 3G UK/Telefónica Ireland*, where the Commission noted the following: "*Although consumers may distinguish between mobile broadband, which they purchase for use on their laptop or tablet, and bundles of voice and data services, which they purchase for their mobile phone, the Commission finds that they form part of the same market based on supply-side substitutability.*" For a consideration of supply-side substitution in the present case, see Section 8.4.4.3 below, where it is shown that the supply-side response of providers of MTDS would not have been sufficiently immediate and effective.

<sup>471</sup> See paragraph 144 of the Reply to the SO and paragraphs 204 and 222 of Annex 13 to the Reply to the SO. See also paragraph 130 of the Reply to the SO and paragraph 204 of Annex 13 to the Reply to the SO: "*It is correct that, from a demand perspective, the convergence between MBB and mobile telephony data services developed gradually during the period of investigation. In the SO the Authority seems to take the view that such convergence did not occur until sometime after December 2012, but this view is not supported by the relevant facts. [...] As the Authority will be aware, the internal Telenor email exchange in November 2012 mentioned by the Authority in the SO suggests that the convergence had been a significant market force since the beginning of 2011.*" Telenor refers to the internal Telenor e-mail exchange in November 2012 (see Document No 658873 – CJO 63, page 4/9). See also paragraph 143 of the Reply to the SO.

even the end of 2010 until the end of 2012. However, as shown above, the Authority considers that there is sufficient evidence to conclude that MTDS did not exert a material competitive constraint on residential stand-alone MBB services until at least the end of 2012.

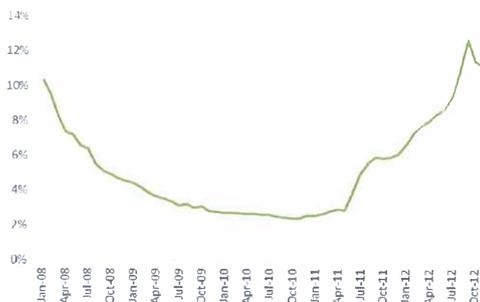
#### 8.4.4.2.6.2 The possibility to add-on the “MBB data allowance” to mobile telephony subscriptions

327. According to Telenor,<sup>472</sup> throughout the Period under Consideration, it offered its subscribers the possibility to either buy a stand-alone MBB plan or add the exact same data allowance at the exact same price on to their mobile telephony subscriptions. Telenor argues that other providers of mobile communications services could do the same.
328. Telenor admits that the proportion of its own residential stand-alone MBB plans taken as add-ons to a mobile telephony subscription was not large (this is also shown in Figure 7 below). However, it considers that the fact this possibility existed as an alternative to which end users could switch, in case of an increase in the price of stand-alone MBB subscriptions by a hypothetical monopolist, proves that MTDS exerted a material competitive constraint on stand-alone MBB subscriptions.
329. The Authority disagrees with Telenor on this point.
330. First, if such add-ons to mobile telephony subscriptions provided end users with the exact same data allowance at the exact same price as stand-alone MBB subscriptions (as Telenor submits), they did not materially differ from stand-alone MBB subscriptions. They are essentially the same product. In the Authority’s view, however, the relevant assessment includes an examination of whether MTDS included in an ordinary telephony subscription could be considered as a substitute for stand-alone MBB subscriptions. Therefore, the possibility to include a residential stand-alone MBB subscription as an add-on to an MTDS subscription, without affecting the price or data allowance of the residential stand-alone MBB offer in any way, provides no evidence of substitutability between MTDS and stand-alone MBB subscriptions during the Period under Consideration.
331. Second, even if, as Telenor states, its subscribers could add the same data volume and at the same price as a stand-alone MBB subscription on to their mobile telephony subscription, the Authority notes (as accepted by Telenor) that this option did not prove to be particularly popular between 2008 and 2012. Indeed, as can be seen in Figure 7 below, the proportion of Telenor’s residential stand-alone MBB plans which were taken as add-ons to telephony subscriptions only reached a maximum of slightly above 12% in July 2012, while for most of the period it was significantly below 10% (and in many months below 4%). This means that at least approximately 88% of Telenor’s residential MBB customers took their residential MBB tariff plan on a stand-alone basis. This shows that there was clearly a separate demand for stand-alone MBB services.

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<sup>472</sup> See paragraph 206 of Annex 13 to the Reply to the SO and also paragraph 114 of the Reply to the SSO. See also Document No 1093684, Telenor’s letter of 25 October 2019 to the Authority, Section 2.

**Figure 7: Proportion of Telenor's residential stand-alone MBB plans taken as add-ons to telephony subscriptions rather than as stand-alone MBB**



Source: Annex 13 to Telenor's Reply to the SO, page 74.

#### 8.4.4.2.6.3 Telenor's interpretation of the consumer surveys

332. Telenor claims<sup>473</sup> that market surveys provide evidence that MBB faced competitive pressure from MTDS. In particular, according to Telenor, the surveys illustrate that: many consumers used internet on their mobile phone; Telenor viewed MTDS as a substitute to MBB; the actual usage was similar for MBB and MTDS; customers that used their MBB subscription on a mobile phone were more satisfied than users of MBB through a USB or via an built-in SIM in their laptop directly; small-screen access (MTDS) and FBB were substitutes for MBB in secondary homes and cottages; and small screen access (MTDS) covered the customers' need for internet access.
333. However, as described in paragraph 303 above, the Authority reiterates the fact that in other internal documents Telenor states that, although more consumers over time used their mobile phone to access the internet, MTDS was considered a complementary service to MBB rather than a substitute. Additionally, as also described in Section 8.4.4.2.2 above, there were significant differences in unit prices (i.e. prices per MB of data) between MTDS and MBB subscriptions during the Period under Consideration.
334. In any event, the Authority disagrees with Telenor's interpretation of the surveys. In some of the surveys, the sample of customers included does not reflect the correct population (i.e. MBB customers). In one survey, all broadband customers are included, including FBB customers without an MBB subscription.<sup>474</sup> In another survey, on the basis of which Telenor claims that mobile phone internet access (MTDS) was viewed as a substitute to MBB,<sup>475</sup> it is explicitly stated that the respondents included did not have

<sup>473</sup> See Telenor's letter to the Authority of 10 December 2019 (Document No 1103119), Section 4 and the Reply to the LoF, Section 3.2.1.

<sup>474</sup> See Document No 1097649 ("Bredbånds- og TV- undersøkelsen – Status og utvikling per Q4 2011"; translation by the Authority: "Broadband and TV survey – Status and development as of Q4 2011"), page 10.

<sup>475</sup> See Document No 1097603, "Behov og drivere mobil bredbånd"; translation by the Authority: "Needs and drivers of mobile broadband" and Telenor's letter of 10 December 2019, page 9.

MBB. In the Authority's view, assessments of substitutability between MBB and MTDS made by reference to customers that do not have an MBB subscription have limited probative value.

335. In order to support its claim that MTDS constrained MBB, Telenor also refers to two surveys showing that a significant share of the customers that terminated their MBB subscription did not replace it with a subscription from a competing MBB provider.<sup>476</sup> While the Authority agrees that the majority of the respondents that terminated their subscription probably continued to use the internet after terminating their MBB subscription, this does not imply that they considered MTDS as a substitute to MBB or that they would have a need for internet 'on the go'. In this context, the Authority notes that many respondents explained that they terminated their subscription due to the fact that they didn't use it. This suggests that the respondents left the market for MBB, which cannot be interpreted as a valid indicator of substitution from MBB to MTDS.
336. In any event, if information related to churn were to be taken into account, the relevant churn to take into consideration would be churn from MBB to MTDS. In this context, the Authority notes that surveys from 2012 show that, on average, only 3%<sup>477</sup> of the respondents explained their termination of MBB by the following reason: "*use internet on the mobile phone*".<sup>478</sup>
337. In relation to this, the Authority also disagrees with Telenor that Nkom's survey from 2013 provides relevant insights regarding substitutability between MBB and MTDS.<sup>479</sup> This survey does not concern the Period under Consideration, as the interviews were undertaken in April-June 2013. As indicated above in Section 8.4.4.2 above, the competitive pressure from MTDS may have become stronger after 2012 and therefore the insights provided in the 2013 survey cannot reliably be used to draw inferences about the previous period, i.e. the Period under Consideration. The probative value of this Nkom survey as regards competitive constraints from MTDS during the Period under Consideration is therefore limited. Regarding Telenor's claim that the actual usage was similar for MBB and MTDS, the Authority notes that the respondents in the survey to which Telenor refers were asked: "*Of the following services, which are the three you use most frequently on your mobile broadband?*"<sup>480</sup> In the Authority's view, an assessment of most frequent use is of limited importance, as it is not necessarily related to the main reason for purchasing MBB (for example to use it 'on the go' or at a cabin). This is also in line with Telenor's assessment in other internal documents, where it stated that MTDS

<sup>476</sup> See Reply to the LoF, pages 15 and 16.

<sup>477</sup> Respectively 0%, 0%, 5% and 7% in Q1– Q4 2012.

<sup>478</sup> Document entitled "*Churn analysis Mobile Broadband (MBB) Q4 2012*" (translation by the Authority of "*Churnanalyse – Mobilt Bredbånd (MBB) Q4 2012*"); see Document No 1097529; see Telenor's reply of 15 November 2019 to the Authority's request for information of 7 November 2019), page 5; translation by the Authority of the following extract: "*Bruker Internett på mobiltelefonen*".

<sup>479</sup> See Reply to the LoF, page 16.

<sup>480</sup> See Document No 1097549, page 29, the Authority's translation of: "*Av de følgende Internett-tjenestene, hvilke er de tre som du oftest bruker det mobile bredbåndet til?*".

was considered a complementary service to MBB, rather than a substitute (see paragraph 303 above).

338. According to Telenor, customers that used their MBB subscription on a mobile phone were more satisfied than users of MBB through a USB or on their laptop directly.<sup>481</sup> The Authority however notes that, at the same time, 85%–95% of Telenor’s customers used or preferred to access their MBB by using other devices than a mobile phone, such as a USB modem (see paragraphs 291–292 above). In the Authority’s view, this likely indicates that most customers preferred other solutions than access through their mobile phone.
339. Further, Telenor claims that two surveys show that small-screen access (MTDS) and FBB were substitutes for MBB in secondary homes and cottages.<sup>482</sup> The Authority does not agree. The sample in the survey to which Telenor refers is not consumers with a MBB subscription, but consumers that have a secondary home or cottage. In the Authority’s view, the relevant sample to analyse would be those who had purchased MBB or considered doing so, as the relevant question is whether those customers would consider MTDS or FBB as substitutes.
340. Finally, Telenor claims that small-screen access (MTDS) covered the customers’ need for internet access.<sup>483</sup> The Authority notes that the survey to which Telenor refers is not conclusive on this point. For instance, when the respondents were asked how they will use MBB in the future, more than 90% (31% + 61%) of the customers respond that they will increase the usage of MBB or use it as today.<sup>484</sup> In the Authority’s view, if the respondents’ need was covered by MTDS, they would not have answered in this way.

#### 8.4.4.2.6.4 Nkom’s assessment in 2010

341. As explained above in paragraph 319, Nkom’s 2010 Market Analysis found that it was *“impractical to distinguish between mobile broadband subscriptions sold as a freestanding product and mobile data traffic sold bundled with voice and SMS with respect to definition of the product market”*.<sup>485</sup> According to Telenor, the Authority cannot disregard the fact that Nkom included MTDS in the relevant market, and that most market participants in the Market 15 consultation disagreed with the retail market defined by the Authority in the present case. Additionally, Telenor submits that the Authority provides no explanation as to why assessments related to Nkom’s regulation are relevant

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<sup>481</sup> See Document No 1097599, page 1.

<sup>482</sup> See Document No 1097603, page 25, and Document No 1097581, page 25. See also Reply to the LoF, page 16.

<sup>483</sup> See Document No 1097553, *“Conjoint-undersøkelse Mobilt Bredbånd”* (translation by the Authority: *“Conjoint survey Mobile Broadband”*), page 27.

<sup>484</sup> See Document No 1097553, page 35.

<sup>485</sup> Nkom’s 2010 Market Analysis, paragraph 63.

in the assessment of FBB (Markets 4 and 5), but not in relation to substitution between MBB and MTDS (Market 15).<sup>486</sup>

342. First, the Authority considers that its retail market definition in this case is justified, notwithstanding the position adopted by Nkom in its 2010 Market Analysis. In this regard, the Authority notes that its SMP Guidelines on *ex ante* regulation set out the following: “*Although NRAs and competition authorities, when examining the same issues in the same circumstances and with the same objectives should in principle reach the same conclusions, it cannot be excluded that, given the differences outlined above, and in particular the broader focus of the NRAs assessment, markets defined for the purposes of competition law and markets defined for the purposes of sector-specific regulation may not always be identical.*”<sup>487</sup>
343. The aim of Nkom’s market definition was to assess whether MNOs held a position of SMP in the wholesale market for access and call origination services on public mobile telephone networks and to decide whether it was necessary to impose *ex ante* regulation at the wholesale level in order to remedy any regulatory concerns. This is different from the aim of the retail market definition in the current case, which explains the different approach taken by the Authority, see also paragraphs 172–173 above. Further, as set out in paragraph 320 above, in its 2016 Market Analysis, Nkom reviewed its position and determined that stand-alone MBB subscriptions and traditional mobile subscriptions consisting of voice, SMS and mobile data (MTDS) were in separate markets.<sup>488</sup>
344. Second, as regards the Authority’s use of information from the Market 4 and 5 public consultation in 2010, the Authority notes that it does not rely on Nkom’s market definition as such, but rather on relevant statements made during that public consultation by Telenor and its closest competitors regarding the characteristics of the products and substitutability between MBB and FBB. No such relevant statements were made by Telenor or its competitors in the Market 15 consultation. In particular, the statements made by market participants do not refer explicitly to the topic relevant for this case, namely whether MTDS was a substitute to MBB.

#### 8.4.4.2.7 Conclusion on demand-side substitution between stand-alone MBB services and MTDS

345. On the basis of the above, the Authority concludes that, from 2008 until at least the end of 2012, MTDS could not be seen as a substitute for residential stand-alone MBB subscriptions. From a demand-side perspective, therefore, they belonged to separate relevant product markets during the Period under Consideration.

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<sup>486</sup> See Reply to the LoF, page 17.

<sup>487</sup> See the Authority’s SMP Guidelines, paragraph 28.

<sup>488</sup> Nkom’s 2016 Market Analysis, paragraph 94.

### 8.4.4.3 *Supply-side substitution*

#### 8.4.4.3.1 *Introduction*

346. As indicated in Section 8.1.1 above, when defining a relevant market, regard may be had both to demand-side substitution and supply-side substitution.
347. As set out above in paragraph 128, for the definition of the relevant market, demand-side substitution constitutes the most immediate and effective disciplinary force on the suppliers of a given product, in particular in relation to their pricing decisions.<sup>489</sup> Demand-side substitution therefore has a prominent role when defining the relevant market. Supply-side substitution<sup>490</sup> may also be taken into account where its effects are equivalent to those of demand-side substitution in terms of effectiveness and immediacy.
348. In Section 8.4.4.3.2 below, the Authority sets out the relevant test for broadening a candidate market on the basis of supply-side substitution. It concludes in Section 8.4.4.3.3 below that this test is not met in the present case.

#### 8.4.4.3.2 *The relevant test*

349. If only *some* suppliers are able to switch production to the focal product (or expand their presence), that is not sufficient for broadening a candidate relevant market on the basis of supply-side substitution.
350. In this respect, the Notice on the definition of the relevant market, referring to different qualities of the same product, states that “*even if for a given final customer or group, of consumers, the different qualities are not substitutable, the different qualities will be grouped into one product market, provided that **most of the suppliers** are able to offer and sell the various qualities immediately and without the significant increases in costs described above. In such cases, the relevant product market will encompass all products that are substitutable in demand and supply, and the current sales of those products will be aggregated so as to give the total value or volume of the market.*”<sup>491</sup>
351. This approach has been applied by the GCEU in a case relating to Article 53 of the EEA Agreement.<sup>492</sup> The European Commission has applied the ‘most suppliers’ test in its decisional practice on the basis that “*the Relevant Market Notice [...] points out that aggregation [based on supply-side substitution] only makes sense when production*

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<sup>489</sup> Notice on the definition of the relevant market, paragraph 13. See also, for example, judgment of 4 July 2006, *easyJet*, T-177/04, EU:T:2006:187, paragraph 99, and judgment of 29 March 2012, *Telefónica*, T-336/07, EU:T:2012:172, paragraph 113.

<sup>490</sup> Notice on the definition of the relevant market, paragraphs 20–23.

<sup>491</sup> Notice on the definition of the relevant market, paragraph 21 (emphasis added by the Authority).

<sup>492</sup> See judgment of 28 April 2010, *Amann & Söhne*, T-446/05, EU:T:2010:165, paragraph 79.

*substitution among a group of products is found to be technologically feasible and economically viable for most, if not all, firms selling one or more of those products”.*<sup>493</sup>

352. The European Commission has also expressed its interpretation of its Notice on the definition of the relevant market (which contains an identical paragraph to the one set out in paragraph 350 above) in a note to the OECD, where it explains that “*where supply-side substitution is partial or not nearly universal [it is] taken into account only at the competitive assessment stage.*”<sup>494</sup>
353. The fact that supply-side substitution needs to be nearly universal is consistent with the view of leading commentators. For example, in a report of June 2001 prepared for the European Commission, Padilla wrote:

*“Consideration of supply-side substitutability constraints should lead to market aggregation only when supply-side substitution is found to be nearly universal, i.e., when production substitution among a group of products is found to be technologically feasible and economically viable for most, if not all, firms selling one or more of those products.”*

*“[...] market aggregation requires more than just the existence of a few producers able to adjust their production lines in response to higher prices for the relevant products. The supply-side response should be nearly universal, i.e., it should involve most, if not all, producers. That is, competition authorities should not only identify potential sources of supply-side substitutability but should also convince themselves about their universal character before moving on to aggregate markets for products that are not demand substitutes.”*<sup>495</sup>

354. This approach is also recommended by the International Competition Network in its Merger Guidelines Workbook,<sup>496</sup> and it is used – referred to as the ‘near universality’

<sup>493</sup> See Commission Decision of 17 December 2008 in Case COMP/M.5046 *Friesland Foods/Campina*, paragraph 159, and Commission Decision of 17 November 2010 in Case COMP/M.5658 *Unilever/Sara Lee*, paragraph 96. See also Commission Decision of 8 January 2016 in Case M.7630 *Fedex/TNT Express*, paragraphs 148 and 149.

<sup>494</sup> Note by the European Commission to the OECD’s Roundtable on Barriers to Entry, 7 October 2005, paragraph 26; available at: <[https://ec.europa.eu/competition/international/multilateral/2005\\_oct\\_barriers\\_entrv.pdf](https://ec.europa.eu/competition/international/multilateral/2005_oct_barriers_entrv.pdf)>, accessed June 2020.

<sup>495</sup> Pages 4 and 23 of “*The role of supply-substitution in the definition of the relevant market in merger control*”, a report prepared by A. J. Padilla (NERA) for DG Enterprise A/4 of the European Commission, June 2001 (emphasis added by the Authority); see Document No 1075884. See also page 28 of the same report: “*The second option (i.e., market aggregation) should be exercised only when supply-side substitution is found to be nearly universal, i.e., when production substitution among a group of products is found to be technologically feasible and economically viable for most, if not all, firms selling one or more of those products.*” (emphasis added by the Authority). More recently, O’Donoghue and Padilla wrote: “*Supply-side substitution also requires that a sufficiently large number of suppliers can switch production to the relevant product in response to a modest price increase.*” (their emphasis). O’Donoghue and Padilla, *The law and economics of Article 102 TFEU*, 2nd ed. Hart Publishing, 2013 (Document No 1075911), page 103, where the authors comment on the European Commission’s Notice on the definition of the relevant market.

<sup>496</sup> Merger Guidelines Workbook released by the International Competition Network in April 2006 (see Document No 1075490), paragraph A.21 at page 24: “*Moreover, the mere fact that some firms producing a product B are able to quickly switch (or extend) supply to product A does not necessarily mean that (i) they can switch (or extend) supply entirely, (ii) they have incentive to do so and (iii) all firms producing B would do so. When*

requirement – by the US competition authorities in their Horizontal Merger Guidelines. The latter state that, “*if this type of supply side substitution is nearly universal among the firms selling one or more of a group of products, the Agencies may use an aggregate description of markets for those products as a matter of convenience*”.<sup>497</sup>

355. Furthermore, as shown in the following paragraphs, the analysis of supply-side substitution requires not only the determination of whether most suppliers had the ability but also the *economic incentives* to switch production following a change in relative prices. The mere *technical feasibility* of switching production does not suffice, and the fact that most suppliers are active in two adjacent product/service segments does not lead automatically to the conclusion that those two segments belong to the same product market.<sup>498</sup>
356. The assessment of incentives is consistent with the European Commission’s approach in case COMP/M.6497 – *Hutchison 3G Austria/Orange Austria*, where it clarified that the “*existence of an actual competitive constraint due to supply-side substitution requires not only the ability to enter or expand in the segment in question but also the incentive to do so*”.<sup>499</sup>

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*considering the product market on the basis of supply-side substitutability, the competition authorities will require that most of the suppliers of product B will be able to offer and sell the various qualities of product A under conditions of immediacy (with the capacity that can be economically reallocated to product A) and in the absence of significant increase in costs before they conclude that product A and B are in the same market.”* (emphasis added by the Authority).

<sup>497</sup> Horizontal Merger Guidelines of the US Department of Justice and the Federal Trade Commission of 19 August 2010 (Document No 1075493), footnote 8.

<sup>498</sup> See, for example, the Commission decisions in cases COMP/M.7265 – *Zimmer/Biomet* (paragraphs 118–122, where the Commission found that primary and revision total knee implants represented distinct product markets, despite the fact that the main suppliers of primary implants also supplied revision implants, with few exceptions); COMP/M.4513 – *Arjowiggins/M-real Zanders Reflex* (paragraphs 43–59, where the Commission looked at whether sheets and reels of carbonless paper were in the same relevant market on the basis of supply-side substitution; the Commission ultimately left this question open); COMP/M.4980 – *ABF/GBI Business* (paragraphs 32–39, where supply-side substitution was ruled out for liquid and compressed yeast); COMP/M.6576 – *Munksjö/Ahlstrom* (paragraphs 250–261, where a specific type of decor paper, pre-impregnated paper (PRIP), was found to be a distinct market from other types of decor paper); and COMP/M.6214 – *Seagate/HDD Business of Samsung* (paragraphs 155–170, where the Commission concluded that there was no supply-side substitution between drives of different form factors, for example, from 3.5" to 2.5", nor between drives within the same form factor but intended for different end-uses – for example, from 3.5" business critical to 3.5" desktop).

<sup>499</sup> Commission Decision of 12 December 2012 in Case M.6497 – *Hutchison 3G Austria/Orange Austria*, paragraph 143. See also Commission Decision of 24 March 2004 in Case COMP/C-3/37.792 – *Microsoft*. In the latter case, the Commission identified a separate market for work group server operating systems. In respect of supply-side substitution, the Commission concluded in paragraph 399 that “*other operating system vendors, including in particular vendors of server operating systems, would not be able to switch their production and distribution assets to work group server operating systems without incurring significant additional costs and risks and within a time framework sufficiently short so as to consider that supply-side considerations are relevant in this case*”. This decision was upheld by the GCEU (judgment of 17 September 2007, *Microsoft*, T-201/04 EU:T:2007:289, paragraph 530).

357. Assessing incentives is also in line with Padilla’s interpretation of the European Commission’s Notice on the definition of the relevant market:<sup>500</sup> “*The second option (i.e., market aggregation) should be exercised only when supply-side substitution is found to be nearly universal, i.e., when production substitution among a group of products is found to be technologically feasible and economically viable for most, if not all, firms selling one or more of those products*”.<sup>501</sup>
358. This is also the approach recommended by the International Competition Network<sup>502</sup> and by Professors Fletcher and Lyons in a report prepared for the European Commission on geographic market definition.<sup>503</sup>
359. Further, the UK Competition Appeal Tribunal (“CAT”) has recognised the importance of incentives in the *Genzyme* case,<sup>504</sup> which involved an abuse of a dominant position due to a margin squeeze. In that case, the CAT upheld the finding by the Office of Fair Trading (“OFT”<sup>505</sup>) that Genzyme had abused its dominant position by imposing a margin squeeze in the supply of Cerezyme at the downstream level, a drug used in the treatment of Gaucher’s disease. Regarding the definition of the relevant retail market (i.e. the supply of homecare services to Gaucher’s patients), the CAT upheld the OFT’s finding that there was no demand-side substitution.<sup>506</sup> It then assessed the OFT’s findings

<sup>500</sup> As set out in paragraph 352 above, the Commission’s Notice contains a paragraph identical to the one in the Authority’s Notice.

<sup>501</sup> See Report (Document No 1075884) referred to in footnote 495 above, page 28 (emphasis added by the Authority); see also pages 4 and 21–23 of this Report (emphasis added by the Authority): “*Furthermore, producers should not only be (technologically) capable to adjust their production, distribution and marketing facilities to supply the relevant products with immediacy and at a low cost; they should also find it privately profitable to divert their production, or mobilize their idle capacity, to enter the relevant market*”; “*In sum, the key questions to be answered in order to determine the viability and credibility of supply-side substitutability as an effective competitive constraint are: [...] (c) Do manufacturers of supply-side substitutes have the (economic) incentives to engage in production of the relevant goods/services?*”

<sup>502</sup> See the Merger Guidelines Workbook released by the International Competition Network in April 2006 (see footnote 496 above), page 24, respectively paragraphs A.21 (see the quote in footnote 496 above) and A.22 (first bullet point): “*During the investigation process, undertakings that may have been identified by the parties or by the case team as potential suppliers might be asked whether substitution is technically possible, about the costs of switching production between products, and the time it would take to switch production. The key question to ask potential suppliers, however, is whether it would be profitable to switch production, given a small (e.g., 5 to 10 per cent) price increase.*” (emphasis added by the Authority)

<sup>503</sup> See Amelia Fletcher and Bruce Lyons, “Geographic Market Definition in European Commission Merger Control: A Study for DG Competition”, January 2016 (see Document No 1075489), page 9. Professors Fletcher and Lyons insist on the relevance of incentives to switch (in addition to ability), see footnote 4 at page 9: “*In fact, the Notice focuses primarily on ability, not incentive. Indeed the word ‘incentive’ does not appear once within the Notice. However in our view incentives are highly relevant to a firm’s decision to switch production, and thus we include them here.*” (emphasis added by the Authority)

<sup>504</sup> Judgment of 11 March 2004 in Case No 1016/1/1/03 *Genzyme Ltd v Office of Fair Trading* [2004] CAT 4 (“*Genzyme Case*”); see Document No 1075912. In its decision, the OFT applied Section 18(1) of the national Competition Act of 1998, which imposes a prohibition that is materially identical to Article 102 TFEU and Article 54 EEA: see paragraphs 3 and 4 of the CAT’s decision.

<sup>505</sup> Now known as the Competition and Markets Authority or “CMA”.

<sup>506</sup> See paragraph 358: “[...] *in the vast majority of cases a patient suffering from Gaucher disease has only one choice of treatment available to him, namely Cerezyme. For Gaucher patients being treated at home, there is no*

that there was insufficient supply-side substitution due to the terms charged by Genzyme for the supply of the drug Cerezyme. The CAT upheld the OFT's finding that, while there were a number of potential suppliers of homecare services to Gaucher's patients, supply-side substitution was feasible only if such providers could obtain supplies of Cerezyme on economically viable terms. However, being the sole supplier of the drug, Genzyme could limit or even fully eliminate supply-side substitution:

*“359. From the point of view of the supply side, there are in theory a number of potential suppliers of homecare services to Gaucher patients, as the decision accepts at paragraph 177. However, in our view it is self evident that a provider of home delivery/homecare services is able to provide such services to Gaucher patients only if he is in a position to obtain supplies of Cerezyme. Furthermore, a provider of such home delivery/homecare services will in practice be able to provide such services to Gaucher patients only if he can obtain supplies of Cerezyme at a price that enables the provision of homecare services to be economically viable.*

*360. Genzyme is the only source of supplies of Cerezyme. It follows that Genzyme, if it wishes, is potentially in a position to foreclose the provision of home delivery/homecare services to Gaucher patients by anyone other than Genzyme itself, either by refusing to supply Cerezyme altogether, or by doing so on terms and conditions which prevent any third party home delivery/homecare services provider from providing such services on an economically viable basis.*

[...]

*365. For the above reasons we find that there is a separate demand to meet the needs of Gaucher patients, for whom no other treatment is available, for the supply of Homecare Services as defined in the decision, including the home delivery of Cerezyme and the supply of nursing where necessary. The supply of such services is a separate economic activity, distinct from the supply of the drug alone. Genzyme is in a position, if it so chooses, to foreclose that supply by third parties by the pricing practices it adopts in relation to Cerezyme. In our view such supply forms a discrete segment of the wider market for homecare services which Genzyme is in a position to monopolise for as long as there is no alternative treatment for Gaucher disease.”<sup>507</sup>*

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*possibility of any alternative treatment not involving the use of Cerezyme. Thus, from the point of view of the demand side, at present there is no realistic possibility of homecare services being supplied to Gaucher patients otherwise than together with the supply of Cerezyme”.*

<sup>507</sup> Paragraphs 359, 360 and 365, emphasis added by the Authority. See also paragraph 367.

360. The *Genzyme* case shows that, even if there are a number of potential suppliers of the retail focal product (residential stand-alone MBB in the present case), supply-side substitution is feasible only if such suppliers can obtain supplies of the wholesale input (in the present case mobile access and origination services) required for providing the retail focal product on economically viable terms. The fact that the dominant supplier of the relevant wholesale input could limit supply-side substitution is therefore a relevant factor for assessing the immediacy and effectiveness of supply-side substitution.
361. According to Pisarkiewicz,<sup>508</sup> the *Genzyme* scenario has similarities to what can be found in certain telecommunications markets, in the sense that in these markets there is also, in theory, a number of potential suppliers of retail telecommunications services. However, to the extent that the ability of these suppliers to effectively exercise a competitive constraint on dominant firms depends on their ability to obtain access to the dominant firm's own wholesale input on economically viable terms, the mere presence of such suppliers is in itself insufficient to render supply-side substitution meaningful. According to Pisarkiewicz, in order to avoid distortions in the delineation of the relevant market, competition authorities, instead of examining whether supply substitution simply exists, should carefully examine the ability of the dominant firm to eliminate the disciplining effects of supply substitution. Such an examination is made by the Authority in Section 8.4.4.3.3 below.
362. The Authority further refers to the CMA's Merger Assessment Guidelines, as support for its view that economic incentives to switch production are relevant when assessing the immediacy and effectiveness of supply-side substitution.<sup>509</sup>
363. Finally, the Authority notes that, as also observed by US competition authorities, evidence of competitive effects can inform market definition, just as market definition can be informative regarding competitive effects.<sup>510</sup>
364. The Authority therefore considers that, for the purposes of market definition (and more specifically for the purposes of assessing the immediacy and effectiveness of supply-side substitution), it is necessary to look at whether it would have been economically viable for suppliers of MTDS to enter the market for residential stand-alone MBB subscriptions (or to expand their presence), e.g. following a change in relative prices. If this were not the case, they would have lacked an economic incentive to switch production, and there would have been no sufficiently immediate and effective supply-side response.

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<sup>508</sup> Anna Renata Pisarkiewicz, *Margin Squeeze in the Electronic Communications Sector, Critical Analysis of the Decisional Practice and Case Law*, Wolters Kluwer 2018, Section 2.3.2 – The Relevance of Supply Substitutability (pages 99–101; see Document No 1115149).

<sup>509</sup> Competition and Markets Authority's Merger Assessment Guidelines (see Document No 1075492), paragraph 5.2.17 at page 33, where it is stated that the CMA may take into account supply-side substitution when “*firms have the ability and incentive quickly (generally within a year) to shift capacity between [...] different products depending on demand for each*”. See also paragraph 5.2.19 at page 34, last bullet point.

<sup>510</sup> See the Horizontal Merger Guidelines of the US Department of Justice and the Federal Trade Commission, issued on 19 August 2010, in particular, Section 4 (page 7); see Document No 1075493.

365. The Authority must thus assess whether *most* suppliers of MTDS had the *ability* and the *economic incentives* to enter the residential stand-alone MBB market or to expand their presence in that market with sufficient effectiveness and immediacy.

#### 8.4.4.3.3 Application to the present case

366. In principle, suppliers of MTDS would have been *technically able* to offer residential stand-alone MBB services during the Period under Consideration (or to expand their offer, if already present). The necessary input at the upstream level (i.e. access and origination services on public mobile telephone networks) is the same for residential stand-alone MBB and MTDS and is available (upstream), either through their own networks (in the case of MNOs) or through a wholesale agreement (in the case of NROs,<sup>511</sup> MVNOs and SPs).

367. However, as shown in paragraphs 368–374 below, during the Period under Consideration, it was not the case that most suppliers of MTDS had the *economic incentives* to enter the residential stand-alone MBB market or to expand their presence in that market with sufficient effectiveness and immediacy.

368. In particular, suppliers of MTDS that did not have a nationwide mobile network and had to rely on the relevant wholesale input of either Telenor or Telia,<sup>512</sup> i.e. NROs, MVNOs and SPs, lacked economic incentives to enter the residential stand-alone MBB market or to expand their presence in that market with sufficient effectiveness and immediacy.

369. This was because Telenor and Telia were in a position to supply the required wholesale input on terms and conditions which prevented these MTDS providers (relying on that relevant input) from providing residential stand-alone MBB services on an economically viable basis. In practice, the wholesale terms offered by Telenor and Telia for the supply of wholesale access and origination services on their mobile networks, in combination with their retail prices for residential stand-alone MBB services, led to negative gross margins for their wholesale customers (NROs, MVNOs and SPs) during the entire Period under Consideration, or the major part of it.<sup>513</sup>

370. As demonstrated in Section 9.2.2.3 below, Telenor had limited incentives to compete with Telia on providing wholesale access, since terms that were too attractive would have increased the competitiveness of access buyers at the retail level. In fact, as demonstrated in Section 10.4 below, Telenor's wholesale customers earned or would have earned negative *gross* margins (that is even without taking into account any incremental retail costs) during the entire Period under Consideration (based on the wholesale tariffs charged by Telenor to SPs) or a major part of it (in the case of the wholesale NRO tariffs charged by Telenor to NwN and the wholesale MVNO tariffs charged by Telenor to

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<sup>511</sup> The network of an NRO has no nationwide coverage and it must therefore buy the wholesale input concerned from an MNO in the areas not covered by its own network.

<sup>512</sup> See footnote 516 below.

<sup>513</sup> As will be shown in Section 8.4.6.3 below, supply-side substitution from the provision of business MBB services to the provision of residential stand-alone MBB services must be ruled out for the same reasons (lack of economic incentives).

Ventelo). This because of the wholesale terms charged by Telenor in combination with its retail prices for residential stand-alone MBB. In addition, Telenor's wholesale MVNO customer TDC, which did not provide residential stand-alone MBB services during the Period under Consideration, did not have economic incentives to enter that market, as it would also have earned negative gross margins.<sup>514</sup> In other words, Telenor's wholesale customers did not have incentives to enter the residential stand-alone MBB market or to expand their presence in that market, because this would not have been economically viable.

371. The Authority's finding is supported by statements made by NwN, which confirmed that a margin squeeze was the main factor restricting it from expanding its offering of MBB services during the Period under Consideration: *"From the perspective that Network Norway had in the relevant period, the main factor restricting Network Norway from offering MBB services was the national roaming tariffs which prevented Network Norway from being able to provide competitive prices for MBB due to a margin squeeze. Consequently, Network Norway did not seek to expand its MBB offering."*<sup>515</sup>
372. As considered in Section 9.2.2 below, Telenor and Telia were in practice the only two real options for buying the relevant wholesale input.<sup>516</sup> However, as is shown below in Section 9.2.2.3, Telia had limited incentives to compete with Telenor on the wholesale market for mobile access and origination services, since wholesale terms that were too favourable would have led to more competition on the relevant retail market.
373. In fact, as described in Annex 2 to this Decision, including an Appendix<sup>517</sup> and the accompanying Excel spreadsheet model,<sup>518</sup> the Authority's calculations<sup>519</sup> show that

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<sup>514</sup> See Document No 1068848 (spreadsheet containing the Authority's margin squeeze calculations).

<sup>515</sup> See Letter from Telia – also on behalf of NwN as its legal predecessor – to the Authority of 30 August 2016 (Document No 1075917), Section 2.2, page 5.

<sup>516</sup> As indicated in paragraph 60 above, during the Period under Consideration, only Telenor and Telia had a nationwide mobile network that enabled them to provide ordinary mobile communications services (which included MTDS) and MBB, exclusively based on their own infrastructure. As shown in Section 9.2.2.2 below, Mobile Norway (or its parents NwN and Tele2) and ICE were not good alternative suppliers of the wholesale input supplied by Telenor or Telia. Therefore, Telenor's argument (see Reply to the SO, paragraphs 169, 247 and 290 and Section 5.5.6) that NROs, MVNOs and SPs had the option of purchasing wholesale data from ICE or Mobile Norway must be rejected.

<sup>517</sup> This Annex, which forms an integral part of the present Decision, sets out the methodology used for calculating the margins of Telia's wholesale customers during the Period under Consideration. In this Annex, the Authority also discusses and rebuts the arguments raised by Telenor regarding the Authority's calculations of the margins of Telia's wholesale customers.

<sup>518</sup> The Authority's calculations were presented in Document No 1076031 as an Annex to the SSO, including an Appendix (see also Annex 2 to this Decision for a description of those calculations). The accompanying spreadsheet model prepared by the Authority was included as Document No 1074655 (confidential version) and Document No 1074657 (non-confidential version). In the LoF, the Authority also provided a slightly revised version of the spreadsheet model originally annexed to the SSO, which included several sensitivity/robustness checks of the calculations presented in the SSO (see Document No 1116378 for the confidential version and Document No 1116433 for the non-confidential version).

<sup>519</sup> These calculations are based on an EEC test. The Authority notes that applying the EEC test to calculate the margins of Telia's wholesale customers is a conservative approach (to the advantage of Telenor). This is because these calculations, unlike those concerning the margins of Telenor's wholesale customers, are not done to test

Telia's wholesale customers also earned or would have earned negative gross margins in the supply of stand-alone MBB services to residential customers during the entire Period under Consideration due to Telia's wholesale terms, in combination with the prevailing retail prices for residential stand-alone MBB services.<sup>520</sup> Moving to Telia's network was therefore not a valid alternative for Telenor's wholesale customers that wanted to start supplying residential stand-alone MBB or to expand their presence in that market,<sup>521</sup> even leaving aside the other switching costs resulting from the contractual terms (contract duration, minimum purchase obligations, discount structures and exclusivity clauses) in Telenor's wholesale contracts<sup>522</sup> and from perceived differences in network quality and coverage.<sup>523</sup>

374. Based on paragraphs 366–373 above, the Authority reaches the conclusion that all three categories of suppliers of MTDS that did not have a nationwide mobile network and had to buy wholesale access and origination services from either Telenor or Telia (i.e. the

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whether a margin squeeze abuse has taken place. They are carried out in order to determine the effectiveness and immediacy of supply-side substitution when defining the relevant retail market. The purpose is therefore to assess whether, based on the wholesale prices charged by Telia, Telia's wholesale customers would have had an economic incentive to enter the residential stand-alone MBB market or to expand their presence, in light of the prevailing retail prices. Assuming that those wholesale customers, as new entrants, would have the same retail customer portfolio and retail volumes and revenues as Telia is a rather unrealistic scenario and therefore the approach set out in Annex 2 (and implemented in the spreadsheets listed in footnote 518) is conservative.

<sup>520</sup> See footnote 518 above. See also Document No 788751, reply by Tele2 and NwN of 9 May 2014 to the Authority's request for information dated 28 March 2014, non-confidential version, pages 7–9, where Tele2 confirmed the following: "*Tele2 decided to offer MBB in May 2008. Prior to the launch, Tele2 considered the price plans and strategic value of the MBB offering carefully, due to the inherent risk of a margins squeeze since Tele2 was an MVNO, relying on paying for all traffic in NetCom's [i.e. Telia's] network.*"

<sup>521</sup> Telenor's argument (see Reply to the SO, paragraph 473, and Annex 14 to the Reply to the SO (see Document No 802048), Section 5.1.2) that NROs, MVNOs and SPs had the option of purchasing wholesale data from Telia must therefore be rejected.

<sup>522</sup> See paragraphs 535–539 below. See also NwN's National Roaming Agreement with Telenor of 3 April 2008 (Document No 657260 – EES 27), pages 6/44 and 18/44; see Clause 1.3(e) for the exclusivity clause and Clause 13.2 for the contract duration); Additional agreement of 2 September 2009 to the NRA agreement with NwN (Document No 657260 – EES 30), pages 2/4 and 3/4; see Clause 2 and Clause 3 for volume obligations and Clause 4 for a new fixed term); Additional agreement 2 of 18 August 2010 to the NRA agreement with NwN (Document No 657260 – EES 28), page 4/9, Clause 5 for the volume obligations and page 8/9, Clause 11 for the new fixed term) and also the letter from Telia – also on behalf of NwN as its legal predecessor – to the Authority of 30 August 2016 (Document No 1075917), Section 2.2, page 6: "*From the perspective that Network Norway had in the relevant period, wholesale customers could have switched from Telenor's network to Telia's network, in theory. However, this possibility was limited by the terms of the national roaming agreements. Network Norway's national roaming agreements in 2008, 2009 and 2010 had a fixed term of 4 years and a substantial purchase obligation, which in combination prevented Network Norway from switching to Telia's network before the fixed contract term expired. Also, the exclusivity clause in the same national roaming agreements prevented Network Norway and other group companies from establishing a parallel national roaming agreement during the contract term. Consequently, should Network Norway have tried to switch to Telia's network prior to the fixed contract term this would entail a substantial risk for a claim from Telenor. This risk was demonstrated when Tele2 AB acquired Network Norway in 2012, and Telenor claimed MNOK 160. The basis of the claim was that Telenor alleged that Network Norway was in breach of the exclusivity clause since Tele2 Norge AS had an existing wholesale agreement with Telia.*"

<sup>523</sup> See paragraphs 531–534 below.

NROs, MVNOs and SPs<sup>524</sup>), did not have sufficient economic incentives to enter the residential stand-alone MBB-market in Norway or to expand their presence in that market.

375. On the basis of the above, the Authority concludes that it was not the case that, during the Period under Consideration, *most* suppliers offering MTDS had incentives to, with sufficient immediacy and effectiveness, enter the residential stand-alone MBB market or to expand their presence in that market. It was therefore impossible for the relevant wholesale customers to enter or expand in the relevant market without incurring significant costs, i.e. a loss.

#### 8.4.4.3.4 *Arguments put forward by Telenor in relation to supply-side substitution*

376. Telenor provides a number of arguments for why it disputes the lack of supply-side substitution in the present case.<sup>525</sup>

377. Telenor notes that, in several decisions relating to mergers in the telecoms sector, the European Commission defined a single relevant market at the downstream level, including both MTDS and MBB services, on the basis of supply-side substitutability.<sup>526</sup> It claims that the same approach should be followed in this case.

378. The Authority acknowledges that, in several decisions relating to mergers in the field of mobile communications services, the European Commission defined a single relevant market at the downstream level, including both MTDS and MBB services, on the basis of supply-side substitutability. However, none of those decisions analysed the mobile communications sector in Norway, and the Authority is bound to define the relevant market in light of the prevailing competitive conditions in Norway specifically, and during the particular Period under Consideration.<sup>527</sup> In the present case, the Authority has determined that, during the Period under Consideration, there was no sufficiently effective and immediate supply-side substitution in Norway.

<sup>524</sup> These three categories represented between 17 and 24 suppliers of ordinary mobile communications services during the Period under Consideration. Their aggregated market share in the market for the provision of ordinary mobile communications services (which included MTDS) was on average 21% during the Period under Consideration (see market shares of the NROs, MVNOs and SPs for ordinary mobile communications services, see Document No 1076160. The Authority's calculation is based on disaggregated figures from Nkom for its 2014 e-com market report; see Document No 781987.

<sup>525</sup> See Reply to the SO, Section 3.4.4 and Annex 13 to the Reply to the SO, Section A.2.2 and Reply to the SSO, Sections 4.5.2 and 4.6.3 and Annex 1 to the Reply to the SSO – CRA Comments, Section 3.3. See also Reply to the LoF, Section 3.2.3.

<sup>526</sup> In paragraph 145 and Section 3.4.2 of the Reply to the SO, Telenor refers to the following cases: COMP/M.3245 – *Vodafone/Singlepoint*; COMP/M.3530 – *TeliaSonera/Orange*; COMP/M.3916 – *T-Mobile Austria /Tele.ring*; COMP/M. 4947 – *Vodafone/Tele2 Italy/Tele2 Spain*; COMP/M.5650 – *T-Mobile/Orange*; COMP/M.6497 – *Hutchison 3G Austria/Orange Austria*; COMP/M.6992 – *Hutchison 3G UK/Telefonica Ireland*; and *Telefónica Deutschland/E-Plus* Decision. See also Reply to the SSO, Section 4.5.2.4.

<sup>527</sup> See the judgment of 22 March 2000, *Coca-Cola*, T-125/97 and T-127/97, EU:T:2000:84, paragraph 82: “*Moreover, in the course of any decision applying Article 86 [Article 102 TFEU] of the Treaty, the Commission must define the relevant market again and make a fresh analysis of the conditions of competition which will not necessarily be based on the same considerations as those underlying the previous finding of a dominant position.*”

379. The Authority does not consider its finding of insufficiency of supply-side substitution to be in contradiction with the findings by the European Commission in its merger decisions relating to the telecoms sector in specific EU Member States. The Authority has assessed the effectiveness and immediacy of supply-side substitution in Norway during the Period under Consideration. Following that analysis, having regard to the specific facts of this case, it has concluded that, due to the absence of economic incentives to enter or to expand in the market for stand-alone residential MBB, supply-side substitution was insufficient.
380. In any event, the definition of the relevant markets may differ in merger and antitrust cases, even if the same methodology is applied.<sup>528</sup> The European Commission precedents referred to by Telenor relate to mergers. In this context, the Authority notes that the nature of the competition issue being examined in such cases (i.e. whether the merger would lead to a significant impediment of effective competition (“SIEC”)) is different compared to the issue addressed in this case, namely whether a certain pricing behaviour constitutes an abuse of a dominant position.
381. The Authority further notes that, in a number of the telecoms merger cases to which Telenor refers, the Commission has nevertheless considered it necessary to analyse competition in different market segments within the overall relevant market for retail mobile communications services, to ensure that the role of incentives and actual competitive constraints are still taken into account in the overall assessment. In Case COMP/M.6992 – *Hutchison 3G UK/Telefonica Ireland*, for example, the Commission states that this was necessary because “*there is little demand-side switching between these segments and supply-side substitutability is not perfect. As a result, the competitive dynamics differ among segments.*”<sup>529</sup> In other words, in these cases, while a broader relevant retail market was defined in the context of the merger-specific assessment, the Commission nevertheless went on to assess the scope for possible competitive concerns to arise based on the competitive dynamics in *specific segments* of that relevant market.<sup>530</sup> Therefore, while the result of defining the relevant market itself has differed in these merger cases, the assessment of competitive dynamics and anti-competitive effects within the sub-segments is conceptually consistent with the practice followed by the Authority in the present case.

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<sup>528</sup> See the Notice on the definition of the relevant market, paragraph 12: “*The criteria to define the relevant market are applied generally for the analysis of certain behaviours in the market and for the analysis of structural changes in the supply of products. This methodology, though, might lead to different results depending on the nature of the competition issue being examined. For instance, the scope of the geographic market might be different when analysing a concentration, where the analysis is essentially prospective, from an analysis of past behaviour. The different time horizon considered in each case might lead to the result that different geographic markets are defined for the same products depending on whether the EFTA Surveillance Authority is examining a change in the structure of supply, such as a concentration or a cooperative joint venture, or issues relating to certain past behaviour.*”

<sup>529</sup> Commission Decision of 28 May 2014 in Case COMP/M.6992 – *Hutchison 3G UK/Telefonica Ireland*, paragraph 151.

<sup>530</sup> Commission Decision of 12 December 2012 in Case COMP/M.6497 – *Hutchison 3G Austria/Orange Austria*, paragraph 140.

382. Telenor claims further that it is unsound to rely on the existence of a technical margin squeeze at a narrow level of aggregation when attempting to define an equally narrow relevant market which the Authority will subsequently use to justify the narrow level of aggregation. According to Telenor, this is circular and self-fulfilling.<sup>531</sup>
383. The Authority rejects Telenor's criticism that its methodology is unsound and circular. The Authority has first assessed demand-side substitution (which takes a leading role when defining the relevant market) and has come to the conclusion that there was limited demand-side substitution from residential stand-alone MBB to potential alternatives. It is only then that the Authority has assessed whether the market should nevertheless be broadened based on supply-side substitution.
384. In the Authority's view, for the purpose of market definition, it is appropriate to look at whether suppliers of MTDS would have obtained positive margins if they had decided to offer stand-alone MBB subscriptions to residential customers (or to expand their presence if already offering this service). If this were not the case, they would have lacked an economic incentive to switch production and, therefore, there would not have been a sufficiently immediate and effective supply-side response. The Authority notes that its conclusion on incentives is not only based on an assessment of the margins that Telenor's wholesale customers earned or would have earned, but also on other factors such as the margins obtained by Telia's wholesale customers.
385. As shown in paragraphs 355-364 above, and particularly in the *Genzyme* case (see paragraph 359 above), even if there are a number of potential suppliers of the retail focal product (residential stand-alone MBB in the present case), supply-side substitution is feasible only if such suppliers could obtain supplies of the wholesale input required (in the present case wholesale mobile access and origination services) for providing the retail focal product on economically viable terms. The fact that the dominant supplier of the relevant wholesale input (and its closest competitor) could limit supply-side substitution is therefore a relevant factor for assessing the immediacy and effectiveness of supply-side substitution.
386. The Authority further notes that in the *Genzyme* case, the CAT, on a similar basis, rejected an argument similar to the one raised by Telenor, as follows:<sup>532</sup> *"Although we take into account Professor Yarrow's comment that it is, in the abstract, potentially confusing to define 'the market' by reference to the behaviour said to constitute the abuse, that is not in our view a compelling criticism of the OFT's approach at paragraphs 173 to 183 of the decision."* The Authority finally recalls that the US competition authorities also consider that *"[e]vidence of competitive effects can inform market definition, just as market definition can be informative regarding competitive effects"*.<sup>533</sup>

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<sup>531</sup> See Annex 13 to the Reply to the SO, paragraph 239, point d; and Reply to the SSO, Section 2.1.4.

<sup>532</sup> See *Genzyme* Case, paragraph 366.

<sup>533</sup> See the Horizontal Merger Guidelines of the US Department of Justice and the Federal Trade Commission, issued on 19 August 2010, in particular, Section 4 (see Document No 1075493).

387. Finally, Telenor raises a number of criticisms in relation to the ‘most suppliers’ test.<sup>534</sup>
388. First, Telenor claims that the Authority employs a new, unprecedented<sup>535</sup> test, which is different from the SO.<sup>536</sup>
389. The Authority disagrees. It is incorrect that Authority applied a new methodology in the SSO, compared to the SO. Further, the methodology is not unprecedented.
390. As explained in the SSO, its Section 2.1.3.3.2 supplements paragraphs 118–124 of the SO.<sup>537</sup> The additional arguments put forward in Section 2.1.3.3.2 of the SSO must be read together with the legal basis for the market definition as set out in Section 8.1 and paragraph 118 of the SO.
391. Paragraph 65 of the SO explicitly refers to the ‘most suppliers’ requirement.<sup>538</sup>
392. Telenor appears to have perfectly understood the ‘most suppliers’ test as set out in the SO, since it describes the test as follows in its Reply to the SO: *“As pointed out by CRA: “The Commission’s Notice suggests that supply side substitutability arguments are most likely to be accepted when ‘most of the suppliers’ are able to offer and sell the various products quickly without significant increases in costs”.*<sup>539</sup>
393. In the SSO, the Authority set out the relevant test with reference to the same paragraphs in the Notice on the definition of the relevant market, namely paragraphs 20–23. The test set out by the Authority in Section 2.1.3.3.2.2 of the SSO is therefore clearly rooted in the SO and in the Authority’s Notice on the definition of the relevant on market.
394. As also explained in the SO, any NRO, MVNO or SP considering switching supply from MTDS to residential stand-alone MBB services would have had to take into account wholesale access prices for mobile data and the corresponding risk of a margin

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<sup>534</sup> See Reply to the SSO, Section 4.5.2 and Annex 1 to this Reply to the SSO – CRA Comments, paragraphs 68–81.

<sup>535</sup> Telenor claims that the ‘most suppliers’ test is not in line with the Authority’s own guidelines and finds no precedents in EEA law; see Reply to the SSO, Section 4.5.2.3.

<sup>536</sup> See Reply to the SSO, Sections 4.5.2.2 and 4.5.2.3 and Annex 1 to the Reply to the SSO – CRA Comments, paragraphs 61–65.

<sup>537</sup> See SSO, paragraph 36. See also paragraph 10, which provides that the SSO *“supplements the SO and should therefore be read together with the latter”*.

<sup>538</sup> It states the following, referring to paragraphs 20 and 23 of the Notice on the definition of the relevant market: *“Supply-side substitutability may also be taken into account when defining markets in situations in which its effects are equivalent to those of demand-side substitution in terms of effectiveness and immediacy. This means that most suppliers are able to switch production to the relevant products in response to small and permanent changes in relative prices and market them in the short term without incurring significant additional costs or risks”* (emphasis added by the Authority). Further, footnote 91 to paragraph 118 of the SO refers to paragraphs 20–23 of the Notice on the definition of relevant market: paragraph 21 of the Notice on the definition of relevant market, states that *“different qualities will be grouped into one product market, provided that most of the suppliers are able to offer and sell the various qualities immediately and without the significant increases in costs referred to above”* (emphasis added by the Authority).

<sup>539</sup> See Reply to the SO, paragraph 148 (emphasis added by the Authority).

squeeze.<sup>540</sup> The SSO complemented this further by showing that Telia's wholesale customers also earned or would have earned negative gross margins when supplying residential stand-alone MBB during the Period under Consideration. The SSO did not contain a new test, but merely elaborated on one of the reasons, namely the existence of a margin squeeze, for rejecting supply-side substitution in the SO.

395. Telenor's claim that the SSO applied a new methodology compared to the SO must therefore be rejected. In any event, the methodology finally retained in the present Decision was already clearly set out in the SSO and Telenor was therefore in an adequate position to provide its observations on that methodology.
396. Second, Telenor claims that the Authority's analysis is not possible to align with the hypothetical monopolist test, because the Authority assesses actual margins and thereby the concrete downstream prices of Telenor and Telia.<sup>541</sup> The Authority notes, however, that the purpose of assessing the margins of Telenor and Telia in this context is not to perform a SSNIP test. Rather, it is intended to determine whether most suppliers would, in practice, have had incentives to enter the residential stand-alone MBB market (or expand their presence) based on the available margins. Similarly, the European Commission does not normally rely on the SSNIP-test exercise in cases where Article 102 TFEU is applied.<sup>542</sup>
397. Third, Telenor considers that, even if the Authority's application of a 'most suppliers' test were within the framework of its guidelines, this test should only be used when markets are defined for the purposes of dominance and merger assessments and not when defining markets that are to be used to assess the effects of an alleged abuse of dominance.<sup>543</sup> Telenor adds that the economic foundations for the 'near universality' test are limited, and its existence owes more to expediency in the context of merger and dominance assessments. According to Telenor, in the context of defining a market to be used to assess effects like in the present case, it is the *reverse near universality* test that is relevant.<sup>544</sup> Telenor alleges that this means that the relevant question is therefore rather whether all or most significant competitors in the supply of the focal product (residential stand-alone MBB in the present case) also supply other products. If so, the relevant market should be broadened to include those other products.
398. The Authority disagrees that the 'most suppliers' test is inappropriate when defining the relevant market for the purpose of assessing the existence of an abuse of a dominant position. As explained above in Section 8.4.4.3.2, the 'most suppliers' test is rooted in the Authority's and the Commission's Notices on the definition of the relevant market. As clearly stated in the Notice, it applies generally for the analysis of certain types of behaviour in the market and for the analysis of structural changes in the supply of

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<sup>540</sup> See SO, paragraph 123.

<sup>541</sup> See Reply to the SSO, paragraph 127.

<sup>542</sup> See footnote 183 above.

<sup>543</sup> See Reply to the SSO, Section 4.5.2.2., and Annex 1 to the Reply to the SSO – CRA Comments, paragraph 11 and Section 3.3.2.

<sup>544</sup> See Annex 1 to the Reply to the SSO – CRA Comments, paragraphs 65–67.

products.<sup>545</sup> In other words, it is fully applicable in antitrust cases as well as in merger cases. Although the Notice explains that market definition might lead to different results depending on the nature of the competition issue being examined,<sup>546</sup> there is nothing in the Notice suggesting that the ‘most suppliers’ test is intended to cover only market definition in merger cases and dominance assessments.

399. Further, Telenor’s argument that, in the context of defining a market to be used to assess effects like in the present case, it is the *reverse near universality* test that is relevant, must be rejected.<sup>547</sup> Such a test has no basis in the case law of the European courts, nor in the practice of the Authority or the European Commission.
400. Additionally, the Authority disagrees that the ‘near universality’ test lacks economic foundations. The rationale for using the ‘most suppliers’ test when defining markets for the purposes of assessing the effects of a merger or dominance<sup>548</sup> is also relevant when defining the relevant market in order to assess the potential anti-competitive effects of a margin squeeze.
401. In a merger or dominance assessment, the aim of taking supply-side substitution into account would normally be to calculate the market shares. The purpose of calculating market shares is to assess the market power of the firms involved. If markets are aggregated in the absence of near-universal substitutability, a competition authority risks defining excessively large markets and underestimating the market power of the merging firms or the dominant firm. The reason is that firms that were not able and/or incentivised to effectively and with immediacy supply the focal product would also be taken into account when calculating the market shares. Everything else being equal, this would underestimate the market power of the firm under investigation.
402. Similarly, the near universality requirement is also relevant when defining the market for assessing the potential anti-competitive effects of a margin squeeze.<sup>549</sup> If it is not the case that most suppliers of the non-focal product were able and had the incentive to effectively and with immediacy supply the focal product, broadening the relevant market to include the non-focal product would overestimate the extent of competition that the firm under investigation actually faces and give a misleading picture of the potential effect of the dominant firm’s pricing behaviour. The purpose is therefore similar to a merger case.
403. In the present case, as demonstrated in Section 8.4.4.3.3 above, during the Period under Consideration, it was not the case that most suppliers of MTDS had the economic incentive to start providing residential stand-alone MBB services or to expand their presence in that market. It is therefore not correct to include MTDS in the relevant market

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<sup>545</sup> See Notice on the definition of the relevant market, paragraph 12.

<sup>546</sup> See Notice on the definition of the relevant market, paragraph 12.

<sup>547</sup> See further paragraph 405 below.

<sup>548</sup> The rationale is explained in “*The role of supply-substitution in the definition of the relevant market in merger control*”, a report prepared by Padilla (NERA) for DG Enterprise A/4 of the European Commission, June 2001 (see Document No 1075884), pages 35-36.

<sup>549</sup> The Authority notes that Telenor agrees that, in the present case, defining the relevant market is aimed at assessing the effects of the alleged abuse of dominance; see Reply to the SSO, paragraph 129.

based on supply-side substitution. To do otherwise would lead to a distortion in the delineation of the relevant market. As demonstrated in paragraphs 369 – 373 above, Telenor and Telia clearly had the ability to eliminate the disciplining effect of supply-side substitution from suppliers relying on their wholesale inputs.

404. Fourth, Telenor claims that the ‘near universality’ requirement was in any event met, because Telenor, Telia and ICE must not be ignored.<sup>550</sup> According to Telenor, these suppliers had economic incentives to offer residential stand-alone MBB services and did in fact do so.<sup>551</sup> According to Telenor, a hypothetical monopolist of MBB would therefore be constrained by supply-side substitution by another MNO.
405. The Authority first recalls that in Section 8.4.4.3.3 above it has taken all relevant market players<sup>552</sup> into account in applying the ‘most suppliers’ test and has concluded that it is not met in this case. As noted in paragraph 352 above, where supply-side substitution is partial or not nearly universal, it is taken into account at the competitive assessment stage. In this context, the Authority also notes that the fact that suppliers are active in two adjacent product/service segments does not lead automatically to the conclusion that those two segments belong to the same product market (see also footnote 498 above).
406. In addition, Telia and ICE are already identified as relevant suppliers of residential stand-alone MBB on the demand side and the magnitude of any competitive constraints stemming from their presence is thus evaluated in the assessment of anti-competitive effects below.<sup>553</sup>
407. Fifth, Telenor claims that the Authority wrongly concludes that wholesale access had to be bought from Telenor and Telia. It claims that “*the next two most significant suppliers of residential mobile telephony data services*”, i.e. NwN and Tele2, also had economic incentives to offer residential stand-alone MBB.<sup>554</sup> According to Telenor, this is shown by the fact that these mobile communications providers explained in their replies to the Authority’s requests for information that they needed to offer stand-alone MBB as part

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<sup>550</sup> See Reply to the SSO, paragraphs 149 – 150; and Annex 1 to the Reply to the SSO – CRA Comments, paragraph 72.

<sup>551</sup> See Annex 1 to the Reply to the SSO – CRA Comments, paragraph 72.

<sup>552</sup> For the avoidance of doubt, this includes Telenor and Telia, in addition to all non-MNOs, but not ICE; see Section 8.4.4.3.3 and, in particular, footnote 524 above. The Authority considers that the presence of ICE is not relevant. This is because an assessment of supply-side substitution involves a consideration of whether firms supplying MTDS would, following a change in relative prices, have the economic incentive to switch their production to the residential stand-alone MBB market or to expand their presence in that market if already present. Due to the specific technology (CDMA 450 network) the company was using at the time (see paragraph 72 above), ICE was not supplying MTDS, and was therefore not able to switch its production from this market to the residential stand-alone MBB market. See Nkom’s Market Analysis 2016, paragraph 304, where it is stated that ICE up to the summer of 2015 only had competed in the retail market for dedicated MBB subscriptions.

<sup>553</sup> See for example Sections 10.5.2.3 and 10.5.2.5.1.1 below. As regards the evidence on capacity constraints during the Period under Consideration, see footnote 572 below.

<sup>554</sup> See Annex 1 to the Reply to the SSO – CRA Comments, paragraph 73.

of a complete offer to customers.<sup>555</sup> In relation to this, Telenor also observes that most of Telenor's competitors did offer residential stand-alone MBB services during the Period under Consideration and that new suppliers entered the market during that period, including Tele2. According to Telenor this is incompatible with a finding of an absence of economic incentives and with a finding that the 'most suppliers' test is not met.<sup>556</sup>

408. These claims must be rejected. As shown in Section 9.2 below, Telenor and Telia were in practice the only real options for the relevant wholesale input concerned. Further, while there may have been some entry in the relevant retail market, as demonstrated in Section 10.5.2.5.5 below, MBB was a must-offer product; therefore, suppliers of MTDS had no choice but to offer residential stand-alone MBB to a certain degree, despite the negative gross margins. The consequence of the negative gross margins was, however, such that mobile communications providers that had to rely on access to Telenor's or Telia's network lacked the ability/incentives to compete more aggressively and were therefore reduced to passive competitors with a notional presence in the residential stand-alone MBB market during the Period under Consideration. This is reflected by their very low market shares.<sup>557</sup> Telenor's arguments that these mobile communications providers looked at the global profitability and not at the profitability of residential stand-alone MBB services in isolation must also be rejected (see Section 10.3.5.5.4 below).
409. Sixth, Telenor argues that the Authority wrongly places undue weight on the position of SPs in the 'most suppliers' test.<sup>558</sup> It considers that what matters is the constraint exerted by significant competitors such as Telia, and that whether competitors like SPs could or could not enter or expand is largely irrelevant. This is not correct. As noted in Section 8.4.4.3.2 above, according to the Notice on the definition of the relevant market, consideration of supply-side substitutability constraints should lead to market aggregation only when supply-side substitution is found to be nearly universal. In addition to showing that SPs (and NROs and MVNOs) did not have the economic incentive to enter or expand in the residential stand-alone MBB market, the existence of Telia (which was taken into account as relevant in both the demand-side assessment and the 'most suppliers' test) has also been taken into account below in the effects assessment. Further, the Authority considers all different access seekers, including SPs, to have competitive significance, as set out in paragraphs 890 and 891 below.
410. Finally, Telenor argues that the Authority fails to take into account that some gross margins became positive during the Period under Consideration. The Authority observes that, although it is correct that NwN's and Ventelo's *gross* margins became positive in September 2010 and December 2010 respectively, it was still the case that most providers

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<sup>555</sup> See Annex 1 to the Reply to the SSO – CRA Comments, paragraph 73.

<sup>556</sup> See Annex 1 to the Reply to the SSO – CRA Comments, paragraph 76.

<sup>557</sup> Telenor's wholesale customers subject to the margin squeeze practices had insignificant market shares in the relevant downstream market. For example, neither Ventelo nor NwN achieved a market share based on revenues above 1% (for the underlying source: see footnote 873 below). In addition, the aggregated market share of the non-MNOs (i.e. excluding Telenor, Telia and ICE) in the relevant downstream market was never above 5.5% (this figure includes both Telenor's and Telia's wholesale customers); see Table 10 at paragraph 645 below.

<sup>558</sup> See Reply to the SSO, paragraph 148.

of MTDS did not have the incentive to enter the residential MBB market or to expand their presence in that market, also after November 2010. In particular, it was, for the reasons set out in paragraph 569 below, not a viable option for the SPs to switch demand to NwN or Ventelo. Moreover, the Authority recalls that, in this case, it has not considered downstream costs at all.<sup>559</sup> Were those costs<sup>560</sup> to be included, even just partially, the small positive margins of NwN or Ventelo in the periods from September 2010 and December 2010 respectively would likely turn negative. This would, in turn, indicate that these specific wholesale customers of Telenor would still likely have had limited incentives during that part of the Period under Consideration to supply residential stand-alone MBB services using Telenor's network.

#### 8.4.4.3.5 *Conclusion on supply-side substitution between residential stand-alone MBB services and MTDS*

411. On the basis of paragraphs 366–375 above, the Authority concludes that, during the Period under Consideration, a supply-side response by providers of MTDS would not have been sufficiently immediate and effective to define the relevant market in this case as broader than stand-alone MBB services for residential customers. In particular, in the present case, the Authority has concluded that it was not the case that most suppliers had economic incentives to switch production from MTDS to residential stand-alone MBB services, because doing so, i.e. buying wholesale access and origination services either from Telenor or Telia, entailed negative margins.

#### 8.4.4.4 *Conclusion*

412. Due to the limited demand-side substitution and the absence of sufficiently effective and immediate supply-side substitution, the Authority concludes that MTDS and residential stand-alone MBB services belonged to separate product markets during the Period under Consideration.

#### 8.4.5 *The cumulative competitive constraint exerted by FBB services (including private and (semi-) public Wi-Fi) and MTDS on residential stand-alone MBB services*

413. Telenor contends<sup>561</sup> that the Authority ignores the cumulative or collective competitive constraint exerted, on the demand side, on residential stand-alone MBB services by FBB services (including private and (semi-)public Wi-Fi) and MTDS together.
414. In light of the conclusions reached in the previous sections, the Authority considers that Telenor's objection is unfounded.
415. In particular, as noted in Section 8.4.3 above, the Authority has concluded that FBB services (including private and (semi-)public Wi-Fi) met different customer needs

<sup>559</sup> See paragraphs 871–872 and 874 below.

<sup>560</sup> See Analysys Mason report (for the full reference: see footnote 1092 below) discussed in paragraphs 868–869 below.

<sup>561</sup> See Reply to the SO, Section 3.4.3 and Annex 13 to the Reply to the SO, Section A.2.1; see also Reply to the SSO, Section 4.2.

compared to residential stand-alone MBB services during the Period under Consideration. Accordingly, FBB services were to be viewed as complements to (rather than substitutes for) residential stand-alone MBB services. Consequently, FBB services (including private and (semi-)public Wi-Fi) were not capable of constraining residential stand-alone MBB services during the Period under Consideration.

416. Moreover, although MTDS could be a potential alternative for residential stand-alone MBB for data usage 'on the go', it has been shown in Section 8.4.4 above that MTDS only exerted a limited competitive constraint on residential stand-alone MBB during the Period under Consideration. The two services met different needs from end users and were complementary (rather than substitutable) services. Therefore, these services were not part of the same relevant market.
417. Accordingly, the Authority concludes that, for these reasons, the cumulative competitive constraint exerted by FBB services (including private and (semi-) public Wi-Fi) and MTDS on residential stand-alone MBB services was at best limited during the Period under Consideration.
418. Furthermore, the methodology set out in the Notice on the definition of the relevant market does not suggest broadening a relevant market on the basis of an assumed aggregate constraint from a collection of weak/ineffective substitutes.<sup>562</sup>
419. On the contrary, according to the Notice, the exercise of market definition consists in identifying the most immediate and effective alternative sources of supply for the customers of the undertakings involved.<sup>563</sup> The Authority's SMP Guidelines also note that products or services which are only to a small, or relative degree interchangeable with each other do not form part of the same relevant market.<sup>564</sup>
420. Moreover, the Authority does not see the relevance of Telenor's reference to the Commission's *Slovak Telekom* Decision.<sup>565</sup> In that case, the Commission included fixed wireless access technologies in the relevant retail market on the basis that they provided "a relatively good substitute" for basic fixed-line broadband offers. As noted above, however, neither FBB services nor MTDS have been identified as a relatively good substitute for the residential standalone MBB services offered during the Period under Consideration.

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<sup>562</sup> The Notice on the definition of the relevant market recognises at paragraphs 57 and 58 that, in certain cases, the existence of chains of substitution, if corroborated by actual evidence related, for example, to price interdependence, might lead to the definition of a relevant market where products at the extreme of the market are not directly substitutable. However, the Notice does not set out a methodology for broadening relevant markets based on an assumed combined constraint from a collection of ineffective demand-side substitutes.

<sup>563</sup> Notice on the definition of the relevant market, paragraph 13.

<sup>564</sup> The Authority's SMP Guidelines, paragraph 45.

<sup>565</sup> Section 4.2 of the Reply to the SSO.

#### 8.4.6 *Were residential and business customers in the same relevant product market for stand-alone MBB services?*

##### 8.4.6.1 *Introduction*

421. Having established that the provision of stand-alone MBB services to residential customers (i.e. the focal product) was a distinct product market from FBB and MTDS during the Period under Consideration, the Authority in the present section considers whether MBB services provided to business customers were part of the same relevant retail market during the Period under Consideration.
422. The Authority first assesses demand-side substitution and then supply-side substitution.
423. As explained below, based on that assessment, the Authority concludes that MBB services provided to business customers were not in the same relevant market as residential stand-alone MBB services during the Period under Consideration.

##### 8.4.6.2 *Demand-side substitution*

424. From a demand-side perspective, the Authority takes the view that residential customers could not have switched to a business-only subscription, because they were not organised as an enterprise and, therefore, did not meet the criteria for subscribing to a business offering.<sup>566</sup>
425. Moreover, throughout the Period under Consideration, mobile communications providers distinguished, in practice, between residential and business customers, even if Telenor itself did not formally offer specific MBB subscriptions reserved for business customers until May 2011.<sup>567</sup> For example, unlike residential customers, business customers typically bought MBB services as part of a bundle together with other mobile communications services (e.g. voice services). Moreover, business customers received a discount based on the total volume of their combined purchases in the bundle. Accordingly, MBB services sold to business customers were, in practice, sold at a different (discounted) price than stand-alone MBB services offered to residential customers. In the Authority's view, these differences in product characteristics and prices further confirm that stand-alone MBB services sold to residential customers and MBB services sold to business customers belonged to different product markets during the Period under Consideration.

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<sup>566</sup> This is confirmed by Telenor in paragraph 243 of Annex 13 to the Reply to the SO, where the following is stated regarding substitution to the business market: "*The SO reasonably concludes that there would have been no such demand side substitutability since residential customers lacked the enterprise criteria required to take out business subscriptions*". See also Nkom's 2016 Market Analysis, paragraph 85: "*For residential customers there will not be an option to switch to business subscriptions since this requires that you have an organization number. Demand-side substitution indicates therefore that there is a reason for distinguishing between business and residential subscriptions*."

<sup>567</sup> Initially, the MBB subscriptions (tariff plans) offered by Telenor were the same for business and residential customers. Telenor introduced specific MBB subscriptions reserved for business customers only in May 2011. See Document No 692609, Telenor data sheet, Annex 1 to letter of 6 November 2013 to the Authority. See also Reply to the SO, Section 3.4.6.2.

426. The Authority's assessment of demand-side substitution is also supported by Telia,<sup>568</sup> and in line with the approach taken in the Norwegian NCA's Decision V2018-20.<sup>569</sup>
427. In its Reply to the SO, Telenor did not challenge the Authority's assessment.<sup>570</sup> However, in its Reply to the LoF, Telenor claims that its consumer surveys did not differentiate between residential and business customers and that this indicates that both categories of customers were viewed as part of the same market during the Period under Consideration.<sup>571</sup>
428. As illustrated in Sections 8.4.3.2 and 8.4.4.2 above, the consumer surveys relied on by the Authority do give significant insights into the residential market. Moreover, the surveys do not provide evidence that residential customers had the ability to switch their subscription to a business subscription. Telenor's claim must therefore be rejected.
429. The Authority therefore concludes that, from a demand-side perspective, residential and business MBB customers belonged to separate markets during the Period under Consideration.

#### 8.4.6.3 Supply-side substitution

430. In the light of the relevant test set out in Section 8.4.4.3.2 above, the Authority assesses whether *most* of the suppliers of MBB services to business customers had the *ability* and the *economic incentives* to enter the residential stand-alone MBB market or to expand their presence in this market with sufficient effectiveness and immediacy.<sup>572</sup>
431. For the same reasons as explained in paragraph 366 above, in principle, suppliers of MBB services to business customers would have been *technically able* to offer these services to residential customers during the Period under Consideration (or to expand their offer, if already present). The necessary input at the upstream level<sup>573</sup> is the same for residential stand-alone MBB and business MBB services and is available (upstream), either through

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<sup>568</sup> See letter from Telia to the Authority of 30 August 2016 (Document No 1075917), Section 2.2, page 3.

<sup>569</sup> See Norwegian NCA's Decision V2018-20, paragraph 443.

<sup>570</sup> See footnote 566 above.

<sup>571</sup> See Reply to the LoF, page 2.

<sup>572</sup> In paragraphs 130–131 of the SO, the Authority listed a number of reasons in support of its preliminary conclusion that suppliers of MBB services to business customers would not have switched their supply to residential customers (or expanded their supply, if they were already supplying residential customers) in a sufficiently immediate and effective manner, mainly based on the premise that the mobile communications providers faced capacity constraints during the Period under Consideration. Further to the Reply to the SO (see Section 3.4.6 and Section A.3.2 of Annex 13 to the Reply to the SO) and additional comments made by Telia to the Authority (letter from Telia to the Authority of 30 August 2016, Document No 1075917), the Authority acknowledges that the evidence in its possession regarding the existence of capacity constraints in Norway during the Period under Consideration is somewhat mixed. In the light of the Authority's consideration of the 'most suppliers' test, it was not however necessary to conclude on this for the purposes of the supply-side substitution assessment in this Decision, which has therefore been conducted on the assumption that no such capacity constraints were present.

<sup>573</sup> Access and origination services on public mobile telephone networks.

the own networks of operators (in the case of MNOs) or through a wholesale agreement (in the case of NROs,<sup>574</sup> MVNOs and SPs).

432. However, during the Period under Consideration, it was not the case that most suppliers of MBB to business customers had the *economic incentives* to enter the residential stand-alone MBB market or to expand their presence in that market with sufficient effectiveness and immediacy.
433. In particular, the Authority has reached the conclusion that, during the Period under Consideration, the suppliers of MBB services to business customers, which relied on either Telenor or Telia for the relevant wholesale input (i.e. the NROs, MVNOs and SPs), lacked economic incentives to start selling stand-alone MBB to residential customers, or to expand their supplies of stand-alone MBB to residential customers, if already doing so. The Authority applies the same test as set out in Section 8.4.4.3.2 above.
434. As discussed in Section 9.2.2 below, in practice Telenor and Telia were the only two real options for buying the relevant wholesale input. However, as demonstrated in paragraphs 370 above and 522 below, given their vertical integration, both Telenor and Telia had limited incentives to compete in the relevant wholesale market and to grant favourable terms to their wholesale customers, which were competitors of their own retail divisions in the downstream markets.
435. In this respect, the Authority recalls that, as shown in Section 10.4 below, Telenor's wholesale customers earned or would have earned negative gross margins during the entire Period under Consideration (based on the wholesale tariffs charged by Telenor to SPs), or a part of it (based on the wholesale NRO tariffs charged by Telenor to NwN and the wholesale MVNO tariffs charged by Telenor to Ventelo). They were therefore unable to compete in an economically viable way with Telenor in the candidate downstream market (i.e. the supply of stand-alone MBB services to residential customers). TDC, which did not provide residential stand-alone MBB services during the Period under Consideration, did not have economic incentives to enter that market, as it would also have earned negative gross margins.<sup>575</sup> In other words, Telenor's wholesale customers did not have incentives to enter the residential stand-alone MBB market, or to expand their presence in that market, because this would not have been economically viable.
436. Furthermore, as is shown paragraph 522 below, Telia had limited incentives to compete with Telenor on the wholesale market for mobile access and origination services, since wholesale terms that were too favourable would have led to more competition on the relevant retail market. In fact, as shown in Annex 2 to this Decision, including an Appendix and the accompanying Excel spreadsheet model,<sup>576</sup> Telia's wholesale customers earned or would have earned negative gross margins in the supply of stand-alone MBB services to residential customers, which in turn limited their incentive to enter that market or expand their production in that market throughout the Period under Consideration. Hence, moving to Telia's network was not a valid alternative for

<sup>574</sup> For the specific areas not covered by their own network, see footnote 511 above.

<sup>575</sup> See Document No 1068848 (spreadsheet containing the Authority's margin squeeze calculations).

<sup>576</sup> See footnote 518 above.

Telenor's wholesale customers that wanted to start supplying residential stand-alone MBB, or to expand their presence in that market, even leaving aside the other switching costs resulting from the contractual terms (contract duration, minimum purchase obligations, discount structures and exclusivity clauses) in Telenor's wholesale contracts and from perceived differences in network quality and coverage.<sup>577</sup>

437. Based on paragraphs 433–436 above, the Authority reaches the conclusion that all three categories of suppliers of business MBB services that did not have a nationwide mobile network, and had to buy wholesale access and origination services from either Telenor or Telia (i.e. the NROs, MVNOs and SPs<sup>578</sup>), did not have sufficient economic incentives to enter the residential stand-alone MBB-market or to expand their presence in that market.
438. On the basis of the above, the Authority concludes that it was not the case, during the Period under Consideration, that *most* suppliers of MBB services to business customers were sufficiently incentivised to enter the market for stand-alone MBB services for residential customers, or to expand in that market if already present. Hence, the supply-side response by the NROs, MVNOs and SPs that depended on Telenor's or Telia's wholesale input does not meet the relevant test (see Section 8.4.4.3.2 above) and would not therefore have been sufficiently immediate and effective to broaden the relevant market by including business customers in addition to residential MBB customers.
439. As considered above (see paragraphs 377–381), this conclusion is not invalidated by the fact that, in certain merger cases in the telecoms sector, the European Commission has defined a single, overall relevant product market at the downstream level including both residential and business customers on the basis of supply-side substitutability. These cases did not concern Norway or the present facts.
440. Nor is this conclusion invalidated by Telenor's criticism that Telenor itself and all of its main competitors (with the exception of TDC) already offered stand-alone MBB services to both business and residential customers during the Period under Consideration.<sup>579</sup> The Authority recalls that, in the present section and in Section 8.4.4.3.3 above, it has taken all relevant market players into account in applying the 'most suppliers' test and has concluded that it is not met in this case.<sup>580</sup> As noted in paragraph 352, where supply-side

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<sup>577</sup> See footnote 522 above.

<sup>578</sup> These three categories represented between 3 to 11 suppliers of MBB services to business customers during the Period under Consideration. Their aggregated market share in the provision of MBB services to business customers was on average 12% during the Period under Consideration (see shares of the NROs, MVNOs and SPs in the supply of business MBB services; see Document No 1076160). The Authority's calculation is based on disaggregated figures from Nkom for its 2014 e-com market report (see Document No 781987).

<sup>579</sup> In paragraph 251 of Annex 13 to the Reply to the SO, Telenor noted that each of the main suppliers of stand-alone MBB started by either offering a stand-alone MBB product that was available to both business and residential customers or by offering stand-alone MBB first to business customers and subsequently expanding the offering to residential customers.

<sup>580</sup> For the avoidance of doubt, this includes all MNOs (including ICE) and all non-MNOs. See further footnote 578 above.

substitution is partial or not nearly universal, it is taken into account at the competitive assessment stage.

441. In this context, the Authority also recalls that the fact that suppliers are active in two adjacent product/service segments does not lead automatically to the conclusion that those two segments belong to the same product market (see also footnote 481 above). In addition, Telia and ICE are already identified as relevant suppliers of residential stand-alone MBB on the demand side and the magnitude of any competitive constraints stemming from their presence is thus evaluated in the assessment of anti-competitive effects below.
442. Lastly, as also noted in paragraph 383 above, the Authority rejects Telenor's criticism that using the finding of any margin squeeze by Telenor in the provision of stand-alone MBB services to residential customers in order to delineate the boundaries of the relevant market in the present case is circular and methodologically unsound. As demonstrated above, this approach is highly relevant to the assessment of economic incentives and is in line with the reasoning of the CAT in the *Genzyme* case.<sup>581</sup>

#### **8.4.6.4 Conclusion on residential vs business MBB services**

443. On the basis of the above, the Authority concludes that, during the Period under Consideration, the provision of stand-alone MBB services to residential customers constituted a separate relevant product market.

#### **8.4.7 Conclusion on the relevant product market at the downstream level**

444. In the previous sections, the Authority has examined whether FBB (including private and (semi-)public Wi-Fi) and MTDS belonged to the same relevant product market as stand-alone MBB services during the Period under Consideration. The Authority has also assessed the cumulative competitive constraint exerted by FBB (including private and (semi-)public Wi-Fi) and MTDS during that period. Furthermore, the Authority has considered whether business and residential customers were part of the same relevant product market.
445. Based on the analysis above, the Authority has reached the conclusion that, for the purposes of the present case, the relevant market at the downstream level, for the Period under Consideration, is no wider than the supply of stand-alone MBB services to residential customers.

### **8.5 The relevant geographic market at the downstream level**

446. At the downstream level, the Authority notes that the retail supply of mobile communications services (such as residential stand-alone MBB services) in Norway has generally corresponded to national borders during the Period under Consideration.

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<sup>581</sup> See, in particular, paragraph 359 of the *Genzyme* Case. See also the Horizontal Merger Guidelines of the US Department of Justice and the Federal Trade Commission, 19 August 2010, in particular, Section 4: "Evidence of competitive effects can inform market definition, just as market definition can be informative regarding competitive effects."

447. For example, Nkom granted licences for the provision of mobile services across the entire Norwegian territory<sup>582</sup> and the coverage of Telenor and Telia's mobile networks (and consequently the coverage of their retail mobile communications) were national in scope during the Period under Consideration.
448. Even in the case of Mobile Norway and ICE (whose networks did not cover the entire territory of Norway during the Period under Consideration), the supply of retail mobile communications services was national in scope. This was possible because mobile communications services providers with more limited network coverage (like NwN and Tele2 (Mobile Norway) and ICE), or without comprehensive network inputs of their own (i.e. MVNOs and SPs), typically supplemented their services by procuring wholesale access and origination inputs from Telenor or Telia in order to facilitate provision of their retail offerings on a national basis.<sup>583</sup>
449. Moreover, aside from possible technical differences depending on the available technology in a given area, the Authority is not aware of any significant business practices according to which mobile communications service providers offered distinct commercial terms and conditions (for example different prices or quality features) depending on a customer's location in Norway during Period under Consideration.<sup>584</sup>
450. In view of the above, the Authority concludes that the geographic scope of the supply of stand-alone MBB services to residential customers in Norway, during the Period under Consideration, was national. Telenor has not challenged the Authority's conclusion.

## 9 DOMINANCE

### 9.1 Introduction

451. Article 54 EEA applies to undertakings. Under the EEA competition rules, the concept of an undertaking encompasses every entity engaged in economic activity, regardless of its legal status and the way in which it is financed.<sup>585</sup> It is the activity consisting of offering goods and services on a given market that is the characteristic feature of an

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<sup>582</sup> According to Nkom's 2010 Market Analysis, paragraph 71, the GSM and UMTS licences issued to Telenor and Telia were connected to Norway's boundaries, and on Svalbard. Similarly, the licences of the infrastructure company Mobile Norway were tied to the Norwegian land territory.

<sup>583</sup> See, for example, NwN's National Roaming Agreement with Telenor of 3 April 2008 (Document No 657260 – EES 27) and Ventelo's MVNO Roaming Agreement with Telenor of 20 October 2005 (Document No 657260 – EES 39).

<sup>584</sup> In Nkom's 2010 Market Analysis, paragraphs 73 and 74, Nkom noted that Teletopia, which was the first provider with an NR agreement, operated with different retail prices depending on whether calls were made on its own network or on the host operator's network. The differentiated pricing was due to higher costs associated with national roaming than for calls on its own network. However, Nkom did not anticipate widespread use of such differentiated retail prices. In addition, such pricing models were considered relevant mostly for very small providers only and thus were not considered to have a major impact on the definition of the geographic market.

<sup>585</sup> Judgment of 19 April 2016 in Case E-14/15 *Holship Norge AS* [2016] EFTA Ct. Rep. 240, paragraph 68 and Article 1 of Protocol 22 to the EEA Agreement.

economic activity.<sup>586</sup> The provision of wholesale access and origination services and retail mobile communications services constitutes such an activity. Telenor is therefore an undertaking for the purpose of applying Article 54 EEA.

452. The assessment of whether an undertaking is in a dominant position and the degree of market power it holds is a preliminary step in the application of Article 54 EEA. Holding a dominant position is not as such prohibited, but it confers a special responsibility on the firm concerned, the scope of which must be considered in light of the specific circumstances of each case.<sup>587</sup>
453. The dominant position referred to in Article 54 EEA relates, according to settled case law, to “*the economic strength enjoyed by an undertaking. That economic strength enables it to prevent effective competition being maintained on the relevant market by giving it the power to behave to an appreciable extent independently of its competitors, customers and ultimately of its consumers.*”<sup>588</sup>
454. The notion of independence, which is a special feature of dominance,<sup>589</sup> is related to the level of competitive constraints that the undertaking in question faces. It is not required for a finding of dominance that the undertaking in question has eliminated all opportunity for competition on the market.<sup>590</sup> The existence of some form of competition in the market does not necessarily rule out a finding of dominance.<sup>591</sup> However, for dominance to exist, the undertaking concerned must have substantial market power so as to have an appreciable influence on the conditions under which competition will develop.<sup>592</sup> Even the existence of lively competition on a particular market does not rule out the possibility that there is a dominant position on that market. This is because the predominant feature of such a position is the ability of the undertaking concerned to act without having to take

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<sup>586</sup>Judgment of 19 April 2016 in Case E-14/15 *Holship Norge AS* [2016] EFTA Ct. Rep. 240, paragraph 69; see also judgment of 11 July 2006, *FENIN*, C-205/03 P, EU:C:2006:453, paragraph 25. See also the Authority’s Decision No 387/11/COL of 14 December 2011 in Case No 59120, *Color Line*, paragraph 138.

<sup>587</sup> Judgment of 18 April 2012 in Case E-15/10 *Posten Norge* [2012] EFTA Ct. Rep. 246, paragraph 127; see also judgment of 9 November 1983, *Michelin I*, 322/81, EU:C:1983:313, paragraph 57; judgment of 6 October 1994, *Tetra Pak II*, T-83/91, EU:T:1994:246, paragraphs 114–115; judgment of 17 July 1998, *ITT Promedia*, T-111/96, EU:T:1998:183, paragraph 139; judgment of 7 October 1999, *Irish Sugar*, T-228/97, EU:T:1999:246, paragraph 112; judgment of 30 September 2003, *Michelin II*, T-203/01, EU:T:2003:250, paragraph 97.

<sup>588</sup> See Judgment of 19 April 2016 in Case E-14/15 *Holship Norge AS* [2016] EFTA Ct. Rep. 240, paragraph 82; see also judgment of 14 February 1978, *United Brands*, 27/76, EU:C:1978:22, paragraph 65; judgment of 13 February 1979, *Hoffmann-La Roche*, 85/76, EU:C:1979:36, paragraph 38. This definition has since then been repeatedly used by the Commission and the Authority and in settled case law.

<sup>589</sup> Judgment of 13 February 1979, *Hoffmann-La Roche*, 85/76, EU:C:1979:36, paragraphs 42–48.

<sup>590</sup> Judgment of 14 February 1978, *United Brands*, 27/76, EU:C:1978:22, paragraph 113.

<sup>591</sup> Judgment of 14 February 1978, *United Brands*, 27/76, EU:C:1978:22, paragraphs 113–121; judgment of 13 February 1979, *Hoffmann-La Roche*, 85/76, EU:C:1979:36, paragraphs 69–78.

<sup>592</sup> Judgment of 13 February 1979, *Hoffmann-La Roche*, 85/76, EU:C:1979:36, paragraph 39.

account of this competition in its market strategy and without for that reason suffering detrimental effects from such behaviour.<sup>593</sup>

455. The existence of a dominant position derives in general from a combination of several factors which, taken separately, are not necessarily individually determinative.<sup>594</sup> One important factor is market shares. Other important factors when assessing dominance are the existence of barriers, preventing either potential competitors from having access to the market (entry barriers) and/or actual competitors from expanding their activities on the market (expansion barriers),<sup>595</sup> as well as buyer power.<sup>596</sup> The existence of switching costs, long-term contracts and lock-in clauses are also relevant factors.<sup>597</sup>
456. In the present case, the Authority considers Nkom's market analyses as relevant background for the assessment of dominance in the relevant wholesale market. Nkom carries out its SMP assessments based on competition law principles and the concept of SMP is equivalent to the concept of dominance under Articles 102 TFEU and 54 EEA.<sup>598</sup>
457. At the same time, however, the Authority recalls that Nkom's analyses were conducted in an *ex ante* (i.e. forward-looking) context, based on expectations regarding *future* market developments in the absence of regulation. The Authority's dominance assessment in the present case is, however, carried out *ex post*, based on *actual* market circumstances, including the presence of *ex ante* regulation in the relevant wholesale market during the Period under Consideration. Notwithstanding certain regulatory remedies imposed by Nkom, the Authority is of the view, as further set out below, that Telenor still had a wide scope of discretion to negotiate the terms of its wholesale access agreements and to behave largely independently of its competitors and customers during the Period under Consideration.

<sup>593</sup> Judgment of 30 January 2007, *France Télécom*, T-340/03, EU:T:2007:22, paragraph 101; judgment of 13 February 1979, *Hoffmann-La Roche*, 85/76, EU:C:1979:36, paragraph 70; judgment of 14 February 1978, *United Brands*, 27/76, EU:C:1978:22, paragraphs 108 to 129.

<sup>594</sup> Judgment of 14 February 1978, *United Brands*, 27/76, EU:C:1978:22, paragraph 66.

<sup>595</sup> Judgment of 14 February 1978, *United Brands*, 27/76, EU:C:1978:22, paragraph 129.

<sup>596</sup> Judgment of 7 October 1999, *Irish Sugar*, T-228/97, EU:T:1999:246, paragraphs 97–104.

<sup>597</sup> See, for example, DG Competition's discussion paper on the application of Article 82 of the Treaty [Article 102 TFEU] to exclusionary abuses of December 2005, available at: <<https://ec.europa.eu/competition/antitrust/art82/discpaper2005.pdf>>, accessed June 2020 ("Commission's Article 102 Discussion Paper"), paragraph 40, page 15: "Other strategic barriers to expansion or entry: [...] Finally, the incumbent firms may through the use of long-term contracts with customers have made it difficult for rivals at a particular point in time to find a sufficient number of customers able to switch supplier that expansion or entry would be profitable." See also the Communication from the Commission — Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty [Article 102 TFEU] to abusive exclusionary conduct by dominant undertakings, OJ C 45, 24.2.2009, p. 7 ("Commission's Article 102 Guidance Paper"), paragraph 17: "The dominant undertaking's own conduct may also create barriers to entry, for example [...] where it has concluded long-term contracts with its customers that have appreciable foreclosing effects".

<sup>598</sup> See paragraph 96 above.

458. As will be shown below, the Authority has come to the conclusion, based on a number of factors, that Telenor enjoyed a dominant position on the wholesale market for access and origination services on public mobile telephone networks in Norway.
459. Nkom arrived at the same conclusion in its 2006 and 2010 Market Analysis,<sup>599</sup> which partly concerned the Period under Consideration.
460. In June 2018, the Norwegian NCA also found that Telenor held a dominant position on this wholesale market between 18 August 2010 and 30 June 2014, i.e. the period which was relevant for the NCA's case and which partially overlaps with the Period under Consideration in the present case.<sup>600</sup>
461. Finally, the Authority notes that the case law does not require the Authority to establish whether Telenor has enjoyed a dominant position in the relevant *retail* market in order to determine whether any of Telenor's pricing practices amount to a margin squeeze.<sup>601</sup> The Authority is, however, of the view that, as explained in Section 9.3 below, Telenor had a high degree of market power in the relevant retail market, i.e. the market for the provision of stand-alone MBB services to residential customers in Norway during the Period under Consideration.

## 9.2 Dominance in the wholesale market for access and origination services on public mobile telephone networks in Norway

### 9.2.1 Market shares

#### 9.2.1.1 Introduction

462. Market shares can be used as a starting point for the dominance analysis, since they provide a useful indication of the market structure and of the competitive importance of the various undertakings active on the market.
463. Although the importance of market shares may vary from one market to another, very high market shares, i.e. above 50%, which have been held for some time, are in

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<sup>599</sup> In its 2006 Market Analysis, Nkom came to the following conclusion: "*Based on the above, NPT [Nkom] has reached the conclusion that Telenor ASA alone has significant market power in the market for access and call origination on public mobile telephone networks (single dominance)*", see Section 6.4. In paragraph 24 of its 2010 SMP Decision, Nkom concluded that "*there is no sustainable competition in the market for access and call origination on mobile networks in Norway. Telenor can, to a large degree, act independently of competitors, customers and consumers, and has significant market power.*" See also Nkom's 2010 Market Analysis, Section 5.7. Even in its 2016 and 2020 market analyses, Nkom still found Telenor to be dominant on this market; see Nkom's 2016 Market Analysis, Section 5.12 and Nkom's 2020 Market Analysis, Section 5.12.

<sup>600</sup> See the Norwegian NCA's Decision V2018-20, Sections 10.2 and 10.3.7. The NCA consulted the Authority on a draft version of this Decision pursuant to Article 11(4) of Chapter II of Protocol 4 to the Surveillance and Court Agreement and the Authority agreed with the NCA's dominance assessment. This was further confirmed by the Norwegian Competition Tribunal, albeit for a slightly shorter period, i.e. from 18 August 2010 to 6 December 2013 (see the Norwegian Competition Tribunal's Decision V03/2019, paragraph 580). An appeal against the latter decision is currently pending.

<sup>601</sup> See judgment of 30 May 2018 in Case E-6/17 *Fjarskipti* [2018] EFTA Ct. Rep. 78, paragraph 84. See also judgment of 17 February 2011, *TeliaSonera Sverige*, C-52/09, EU:C:2011:83, paragraphs 83–89.

themselves, save for in exceptional circumstances, evidence of the existence of a dominant position within the meaning of Article 54 EEA.<sup>602</sup>

464. The evolution of the market shares over time, e.g. whether they are stable or not,<sup>603</sup> and the relationship between the market shares of the undertaking concerned and of its competitors, especially those of the next largest competitor(s), are also relevant factors in assessing a dominant position.<sup>604</sup>

#### 9.2.1.2 *Market shares based on call traffic*

465. As already noted, wholesale inputs for mobile voice (calls) and data services were typically supplied together as part of the same wholesale customer contract throughout the Period under Consideration.<sup>605</sup> In the Authority's view, the market shares for originated call minutes can therefore provide a useful indication of the MNOs' (i.e. Telenor, Telia and Mobile Norway) respective strength in the wholesale market for access and origination services on public mobile telephone networks throughout the relevant period.<sup>606</sup>

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<sup>602</sup> Judgment of 19 April 2016 in Case E-14/15 *Holship Norge AS* [2016] EFTA Ct. Rep. 240, paragraph 83; judgment of 13 February 1979, *Hoffmann-La Roche*, 85/76, EU:C:1979:36, paragraph 41. See also judgment of 3 July 1991, *AKZO*, 62/86, EU:C:1991:286, paragraph 60; judgment of 7 October 1999, *Irish Sugar*, T-228/97, EU:T:1999:246, paragraph 70; judgment of 12 December 1991, *Hilti*, T-30/89, EU:T:1990:27, paragraph 91; judgment of 6 October 1994, *Tetra Pak II*, T-83/91, EU:T:1994:246, paragraph 109, and judgment of 30 January 2007, *France Télécom*, T-340/03, EU:T:2007:22, paragraph 100.

<sup>603</sup> Judgment of 13 February 1979, *Hoffmann-La Roche*, 85/76, EU:C:1979:36, paragraph 41; judgment of 29 March 2012, *Telefónica*, T-336/07, EU:T:2012:172, paragraph 149.

<sup>604</sup> Judgment of 13 February 1979, *Hoffmann-La Roche*, 85/76, EU:C:1979:36, paragraph 48.

<sup>605</sup> See Section 8.2.1 above. Telenor confirmed the joint provision of inputs for mobile voice and data services, although it added that it has never been a requirement; see Reply to the SO, paragraph 288.

<sup>606</sup> Telenor does not dispute the accuracy of the market shares presented in Table 9 below. Regarding their relevance as an indicator of the MNOs' respective strength in the relevant wholesale market, Telenor acknowledges that "*call origination was a driver in the first part of the period of investigation, when mobile data communication was not yet decisive for access seekers in their competition on the retail level*", although it considers that "*the shift of emphasis from voice to data at the retail level did have an impact on competition also on the wholesale level.*" See paragraph 287 of the Reply to the SO.

466. Wholesale market shares based on the number of call minutes originated<sup>607</sup> by the MNOs Telenor, Telia and Mobile Norway in 2005, 2009, 2012 and 2013 are shown in Table 9 below.

**Table 9: Wholesale market shares based on number of call minutes**

MNO	2005	2009	2012	2013
Telenor <sup>608</sup>	71%	63%	63%	63%
Telia <sup>609</sup>	29%	36%	31%	30%
Mobile Norway <sup>610</sup>	-	1%	6%	7%

*Sources: Nkom for the years 2005, 2009 and 2013,<sup>611</sup> Tele2 for 2012.<sup>612</sup>*

467. The market shares above include internal sales (i.e. sales to the MNOs' downstream retail operations) as well as external wholesale sales by these MNOs in Norway, i.e. traffic from wholesale customers (NROs, MVNOs and SPs) is attributed to the relevant host MNO.<sup>613</sup>

<sup>607</sup> Market shares based on revenues could not be calculated due to the absence of revenue figures at wholesale level for internal sales.

<sup>608</sup> Including NwN's traffic roamed on Telenor's network.

<sup>609</sup> Including Tele2's traffic roamed on Telia's network.

<sup>610</sup> Mobile Norway only provided access to its joint owners Tele2 and NwN, i.e. it did not have any external customers. Of the latter, only NwN had wholesale customers (see paragraph 504 below).

<sup>611</sup> Regarding the Market Shares from 2005, 2009, 2013 – see the table in paragraph 239 of Nkom's 2014 draft market analysis. In relation to the Market Shares from 2005, see also the table in paragraph 155 of Nkom's 2006 market analysis. Furthermore, in relation to the Market Shares from 2012 and 2013, see Nkom's market analysis from 2016, paragraph 630: "At wholesale level, Telenor has a stable market share of around 64 per cent originated minutes in the period from the previous market analysis until the end of 2014". In relation to the Market Shares from 2005, 2009 and 2014, see also the table in paragraph 310 of Nkom's market analysis from 2016.

<sup>612</sup> See Document No 788755, presentation by Tele2 to the Authority dated 7 August 2013, page 5. Tele2 estimated Telenor's market share on the relevant wholesale market (including NwN's traffic roamed on Telenor's network) to be 63% in the second half of 2012. In the same period, according to Tele2's estimates, Telia's market share (including Tele2's traffic roamed on Telia's network) was 31% and the combined share of Tele2's and NwN's own traffic (on the Mobile Norway network) was 6%.

<sup>613</sup> For example, the figures for Telenor include Telenor's own traffic as well as the portion of NwN's traffic carried on Telenor's network. According to Nkom, in 2010, 80% of NwN's traffic was national roaming on Telenor's network. Since Telenor received income from such traffic, Nkom considered that, in assessing Telenor's relative strength on the wholesale market, it was reasonable to attribute this part of NwN's traffic to Telenor. See Document No 782881, Nkom's 2010 Market Analysis, paragraphs 208–209. The Authority agreed with Nkom's assessment on this point: see the Authority's comments in its letter of 30 July 2010, Document No 565977. In its judgment of 29 November 2012, the District Court of Asker and Bærum applied the same measurement for market shares for the purpose of assessing dominance as Nkom in its 2010 Market Analysis (see Case 12-051158TVI – *AHER2, Telenor / Network Norway* of 29 November 2012, "the November 2012 Asker and Bærum District Court Judgment", at page 22-23). See also the Norwegian NCA's Decision V2018-20, paragraphs 506-509, as well as the Competition Tribunal's Decision V03/2019, paragraph 144.

468. Since ICE did not provide mobile voice services on its network during the Period under Consideration<sup>614</sup> and therefore did not generate call minutes, it does not figure among the MNOs included in Table 9 above. The Authority is of the view that this does not have an impact on its findings, given the lack of material competitive constraint exerted by ICE on the wholesale market during the Period under Consideration, as explained in Section 9.2.2.2 below.<sup>615</sup>
469. As mentioned in Section 9.1 above, the stability of market shares over time and relative market shares, i.e. the relationship between the market shares of the undertaking concerned and of its competitors, especially those of the next largest competitors, are relevant factors in assessing a dominant position.<sup>616</sup>
470. As shown in Table 9 above, from 2009 and until at least the end of the Period under Consideration, Telenor's market share remained at a very high and relatively stable level of around 63%, which is above the threshold typically considered to evidence dominance in competition law. Telenor held a stable leading market position throughout that period, surpassing by far the share of its competitors. Telenor's share was, for example, at different points more than twice the size of that of its largest competitor, Telia (whose market share declined from 36% in 2009 to 31% at the end of 2012).
471. The Authority acknowledges the decrease in Telenor's market share between 2005 and 2009. However, this reduction was mainly due to an acquisition by Telia and some wholesale customer switching in 2007 and early 2008.<sup>617</sup> First, Telia acquired the SP Chess in 2005,<sup>618</sup> which meant that, after the acquisition, approximately two-thirds of the Chess customer base was gradually transferred from Telenor's mobile network to Telia's network. The Authority notes, however, that changes in market shares caused by a merger are not in themselves indicative of effective competition due to the rivalry between undertakings on the market.<sup>619</sup> Second, Tele2 moved from Telenor to Telia in 2007/early 2008,<sup>620</sup> resulting in over 8% of the total customer base changing host network (in May

<sup>614</sup> See paragraph 72 above.

<sup>615</sup> As indicated in paragraph 508 below, during the Period under Consideration, ICE only provided wholesale access to data services to two small SPs (in addition to its own retail division). Thus, if the Authority had been in a position to calculate wholesale market shares based on revenues, those shares would have likely shown that ICE had only a marginal presence on the wholesale market during the Period under Consideration.

<sup>616</sup> Judgment of 13 February 1979, *Hoffmann-La Roche*, 85/76, EU:C:1979:36, paragraphs 41 and 48; and judgment of 29 March 2012, *Telefónica*, T-336/07, EU:T:2012:172, paragraph 149.

<sup>617</sup> See Nkom's 2010 Market Analysis, paragraph 205.

<sup>618</sup> See Telia press release of 29 August 2005 (available at: <https://www.teliacompany.com/en/news/press-releases/2005/8/teliasonera-strengthens-its-number-two-position-in-norway-and-acquires-chesssense/>), accessed June 2020): "*TeliaSonera AB has signed a final share purchase agreement to acquire 91.2 percent of Vollvik Gruppen AS in Norway, which owns 100 percent of the service provider Chess/Sense.*" Chess had 405 000 subscribers in Norway as of June 2005.

<sup>619</sup> See, for example, the Commission's Article 102 Discussion Paper, paragraph 29.

<sup>620</sup> Tele2 signed an MVNO agreement with Telenor in September 2002 (see Document No 1135193), which started on 31 March 2003, with a duration of 5 years. See also Document No 788755, presentation by Tele2 to the Authority dated 7 August 2013, page 39 and Tele2 press release of 11 May 2007: "*Tele2 Norway signs agreement with TeliaSonera-owned NetCom on access to their mobile network*", available at: <https://www.tele2.com/media/press-releases/2007/tele2-norway-signs-agreement-with-teliasonera-owned->

2007, Tele2 had more than 400 000 mobile customers<sup>621</sup>); this latter event largely explains the increase in Telia's market share between 2005 and 2009 in Table 9 above. The impact of Tele2's move to Telia was partially offset by NwN's transfer of its wholesale mobile access and origination purchases from Telia to Telenor, in the first part of 2008.<sup>622</sup>

472. After the changes in 2007/early 2008 described in the previous paragraph, the market structure remained relatively static until 2014.<sup>623</sup> The acquisition and the limited switching in 2007/early 2008 are therefore not enough to affect the Authority's finding that Telenor maintained a stable leading market position during the Period under Consideration.

### 9.2.1.3 Telenor's arguments regarding market shares

#### 9.2.1.3.1 Relevance of market shares in alleged "bidding" markets

473. Telenor contends<sup>624</sup> that the wholesale supply of mobile access and origination services is, in essence, a bidding market, characterised by a few large customers which conclude contracts of significant size. As such, according to Telenor, market shares can change substantially at any point in time if a large customer were to switch provider, and thus are not a valid indicator of market power at the wholesale level. Instead, according to Telenor, what is relevant is its competitors' ability to compete for new contracts.

474. To support its claim that market shares are less relevant when assessing dominance in an alleged bidding market such as mobile access and origination services, Telenor refers<sup>625</sup> to the judgment of the GCEU in *General Electric*, where the Court found: "*market shares as at a given date are less significant for the analysis of a market such as the market for jet engines for large commercial aircraft than, for example, for the analysis of a market for everyday consumer goods. Although not formally accepting that the market for large commercial jet aircraft engines is a 'bidding market', the Commission accepted before*

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[netcom-on-access-to-their-mobile-network](#)>, accessed June 2020). As explained in Section 9.2.2.3 below, Tele2 moved to Telia's network only after the renegotiation of its existing contract with Telenor did not lead to an acceptable offer from the latter. According to Nkom's 2010 Market Analysis, paragraph 205, Tele2's transfer from Telenor's network to Telia's network took place in 2007. The MVNO agreement between Tele2 and Telia (see Document No 847815) was indeed signed on 11 May 2007, but Tele2 still had an MVNO agreement with Telenor, which only ended on 31 March 2008; see Document No 788755, presentation by Tele2 to the Authority dated 7 August 2013, page 40 and also Tele2 press release of 11 May 2007.

<sup>621</sup> See Tele2 press release of 11 May 2007: "*Tele2 Norway signs agreement with TeliaSonera-owned NetCom on access to their mobile network*", available at: <<https://www.tele2.com/media/press-releases/2007/tele2-norway-signs-agreement-with-teliasonera-owned-netcom-on-access-to-their-mobile-network>>, accessed June 2020.

<sup>622</sup> See also Section 9.2.2.3 below, for details about the switching of Tele2 and NwN away from their existing access provider.

<sup>623</sup> In July 2011, Tele2 acquired NwN (see paragraph 74 above), although Tele2 remained with Telia and NwN with Telenor until 2014 (when Tele2 joined NwN on Telenor's network). However, the agreement with Telenor was terminated upon the subsequent acquisition of Tele2 by Telia (see paragraph 77 above).

<sup>624</sup> See Reply to the SO, Sections 4.3.1 and 4.3.2. See also Reply to the SSO, Section 5 and Annex 1 to the Reply to the SSO – CRA Comments, Section 4.

<sup>625</sup> Reply to the SO, Section 4.3.1.

*the Court that one characteristic of the market is the award of a limited number of high-value contracts. On such a market the fact that a particular company has had a number of recent 'wins' does not necessarily mean that one of its competitors will not be successful in the next competition. Provided that it has a competitive product and that other factors are not heavily weighted in the first company's favour, a competitor can always win a valuable contract and increase its market share considerably at one go.*<sup>626</sup>

475. Telenor, however, ignores the fact that, while the GCEU held that market shares at a given date were less significant for the analysis of the market under consideration in that particular case, it added: *"However, such a finding does not mean that market shares are of virtually no value in assessing the strength of the various manufacturers on a market of that kind, especially where those shares remain relatively stable or reveal that one undertaking is tending to strengthen its position."*<sup>627</sup>
476. Moreover, according to the GCEU: *"Even on a bidding market, the fact of a manufacturer maintaining, or even increasing, its market share over a number of years in succession is an indication of market strength. A time must come when the difference between one manufacturer's market share and that of its competitors can no longer be dismissed as a function of the limited number of competitions that constitute demand on the market."*<sup>628</sup>
477. In the Authority's view, it is clear from the *General Electric* judgment that market shares *can* and *do* have relevance when assessing dominance in a market characterised by a limited number of high-value contracts, such as mobile access and origination services or large commercial jet aircraft engines (the Authority does not accept that the wholesale market in the present case is a 'bidding market' as such, but does acknowledge that the number of contracts are limited). The relevance of market shares has also been recognised by the European Commission in recent merger cases in the telecoms sector, for example, Case M.7758 – *Hutchison 3G Italy/Wind/JV*: *"Market shares in the wholesale market for access and call origination on public mobile networks can be subject to large variations, should a large wholesale customer switch host MNO or be acquired by an MNO. Nevertheless, market shares can provide an indication of the operators' market positions."*<sup>629</sup> The Authority further recalls that Telenor's market shares remained relatively static throughout the Period under Consideration (see paragraphs 470–472 above).
478. Moreover, in this case, the Authority has not looked at market shares in isolation to assess dominance. It has examined market shares, which provide a first indication, in combination with other factors, such as the lack of material competitive constraints from other MNOs, barriers to entry and expansion and limited potential competition, and a lack of countervailing buyer power (as discussed in the next sections)<sup>630</sup> which, overall,

<sup>626</sup> Judgment of 14 December 2005, *General Electric*, T-210/01, EU:T:2005:456, paragraph 149. The case concerned the market for large commercial jet aircraft engines.

<sup>627</sup> *Ibidem*, paragraph 150.

<sup>628</sup> *Ibidem*, paragraph 151.

<sup>629</sup> Commission Decision of 1 September 2016 in Case M.7758 – *Hutchison 3G Italy/Wind/JV*, paragraph 1236.

<sup>630</sup> Telenor's claim that the Authority unduly relies exclusively on market shares and that it ignores other precedents, such as Commission Decision of 11 May 2016 in Case M.7612 – *Hutchison 3G UK/Telefónica UK*,

confirm the Authority's conclusion that Telenor held a dominant position on the relevant wholesale market during the Period under Consideration.<sup>631</sup>

#### 9.2.1.3.2 *Inclusion of internal sales*

479. Telenor submits further that, if market shares are used to reflect market strength in the wholesale market in this case, they should, in any event, exclude Telenor's internal sales (i.e. sales to its downstream retail operations).<sup>632</sup>
480. According to Telenor, where there is already a merchant market (in which access is sold to external wholesale customers), in the absence of capacity constraints, there is no reason to include internal sales. In Telenor's view, MNOs did not need to consider diverting capacity from self-supply to the merchant market, because they had spare capacity and were thus able and willing to expand capacity to serve the merchant market. On this basis, Telenor argues that including its internal sales in the calculation of the market shares at the wholesale level does not add anything in terms of understanding whether it had a dominant position on the relevant wholesale market. According to Telenor, only its share on the merchant market is relevant for assessing market power.<sup>633</sup> Telenor claims that, once its market shares in the merchant market are considered, no dominant position can be found.<sup>634</sup>
481. At the outset, the Authority notes that, as explained in Section 9.2.1.3.3 below, Telenor's market share on the merchant market over time also supports the Authority's conclusion that Telenor was dominant on the relevant market at the upstream level during the Period under Consideration. Leaving that finding aside, however, the Authority is of the view that internal sales should be included in the wholesale market shares, for the reasons set out below.
482. A vertically-integrated MNO can use its capacity to supply its own downstream retail operations, external wholesale customers or both. Even in the absence of capacity constraints, when deciding what amount of capacity to sell on the merchant market (if any), the vertically-integrated MNO will consider the impact that selling capacity to external wholesale customers has on the profitability of its own downstream retail operations (as well as on its own overall profitability).
483. It is possible, for example, that, while the upstream wholesale operations earn additional profits from selling capacity on the merchant wholesale market, the downstream retail operations will, as a result, face more competition on the downstream market and thus

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in order to assess dominance in this case (see Reply to the SSO, Section 5.3, and Annex 1 to the Reply to the SSO – CRA Comments, Section 4.1) is therefore unfounded.

<sup>631</sup> As noted in Section 9.1, dominance can be established through a combination of factors which, taken separately, are not necessarily individually determinative. See paragraph 455 above and judgment of 14 February 1978, *United Brands*, 27/76, EU:C:1978:22, paragraph 66.

<sup>632</sup> See Reply to the SO, Section 4.3.6.

<sup>633</sup> See Reply to the SO, Section 4.3.6.2. See also Reply to the SSO, Section 5.3, and Annex 1 to the Reply to the SSO – CRA Comments, Section 4.1.

<sup>634</sup> See Reply to the SO, Sections 4.6.3.2 and 4.3.6.3.

become less profitable. It is also conceivable that these lower profits at the downstream level offset the additional profits earned at the upstream level, so that, overall, the vertically-integrated MNO earns a lower amount of profits if it decides to serve the merchant market (or to expand its sales on that market).<sup>635</sup>

484. A vertically-integrated MNO will therefore consider the impact that selling capacity to external wholesale customers has on the profitability of its own downstream retail operations (as well on its own overall profitability). This is shown by internal Telenor documents.
485. The Authority refers as an example to a document entitled “*Wholesale strategy for Telenor Mobile*”<sup>636</sup>, which states:<sup>637</sup>
- “[confidential translation by the Authority of a quote describing the strategy]”
486. The Authority refers further to the following extract from an internal document entitled “*Action plan – Wholesale mobile data pricing*”<sup>638</sup> of 3 September 2008 from the Division Director of Telenor’s Wholesale and Regulatory Division, to Telenor management, which states the following:<sup>639</sup>
- “[confidential translation by the Authority of a quote describing the strategy]”
487. Selling capacity on the merchant market can therefore have undesired effects on the downstream operations of vertically-integrated MNOs (such as Telenor and Telia). Failing to taking into account their internal sales would thus give a misleading picture of their incentives, as vertically-integrated suppliers, to supply to third parties and of their strength at the upstream level. The Authority is therefore of the view that internal sales should be included in the market shares at the upstream level.

<sup>635</sup> This ‘cannibalisation’ effect was, for example, taken into account by the European Commission in the following merger cases: Commission Decision of 1 September 2016 in Case M.7758 – *Hutchison 3G Italy/Wind/JV*, paragraphs 1226–1228; and Commission Decision of 11 May 2016 in Case M.7612 – *Hutchison 3G UK/Telefonica UK*, paragraphs 1836–1844. On the tension between profitability at the upstream and downstream levels resulting from selling capacity to external wholesale customers, see also the Norwegian NCA’s Merger Decision V2015-1, paragraphs 485–488 and 515, and the Norwegian NCA’s Decision V2018-20, Section 10.2.2.

<sup>636</sup> Translation by the Authority of: “*Wholesalestrategi for Telenor Mobil*”; see Document No 658362, pages 25–26 (EES 92, pages 1 and 2). Contrary to what Telenor argues at page 22 of its Reply to the LoF, the Authority does not refer to this document to support “*the claim that Telenor held a dominant position*”, but to support its view that a vertically-integrated MNO, like Telenor, will consider the impact that selling capacity to external wholesale customers has on the profitability of its own downstream retail operations. The fact that Telenor is unable to say whether this document is a draft, an internal memo or otherwise does not alter the fact that this was the view expressed internally by at least certain Telenor staff when describing the wholesale strategy existing at the time (as indicated by Telenor the undated document seems to relate to 2007 or 2008).

<sup>637</sup> Translation by the Authority of the following extracts: “[confidential quote in Norwegian describing the strategy]”.

<sup>638</sup> Translation by the Authority of: “*Handlingsplan – Wholesale mobil datapricing*”; see Document No 658362, page 16 (EES 89, page 1).

<sup>639</sup> Translation by the Authority of the following extracts: “[confidential quote in Norwegian describing the strategy]”.

488. This conclusion is consistent with Nkom's decisional practice since 2006 relating to the wholesale market for access and origination services on public mobile telephone networks.<sup>640</sup> It is also consistent with the Norwegian NCA's decisional practice in both merger and unilateral conduct cases.<sup>641</sup> Further, as noted by Nkom in 2016,<sup>642</sup> a BEREC report of March 2010 on self-supply shows that a majority of the NRAs in the EU also take self-supply into account in both the definition of the relevant market and the assessment of SMP when analysing wholesale markets.<sup>643</sup>
489. Telenor also claims that, when the Authority's Notice on the definition of the relevant market states that market shares for each supplier are calculated "*on the basis of their sales of the relevant products*",<sup>644</sup> the term "*sales*" in the Notice should be distinguished from internal transfers.<sup>645</sup> The Authority disagrees with Telenor on this point, since there is nothing in the Notice to support the view that the term "*sales*" refers to external sales only.<sup>646</sup>
490. Finally, Telenor refers to the Commission's Explanatory Note accompanying the Commission's 2007 Recommendation on relevant markets (equivalent to the Authority's 2008 Recommendation on relevant markets).<sup>647</sup> According to Telenor, this 2007 Explanatory Note suggests that, if there is a merchant market and there are no capacity constraints, internal sales should be excluded from the calculation of market shares.
491. The Authority, however, disagrees with this interpretation, since the relevant section<sup>648</sup> in fact states the opposite: "*In cases where there is likely demand substitution, i.e. where wholesale customers are interested in procuring from alternative operators, it may be*

<sup>640</sup> See Nkom's 2006 Market Analysis, paragraphs 88 and 155–161; Nkom's 2010 Market Analysis, paragraphs 41, 444 and 485; Nkom's 2016 Market Analysis, paragraphs 135, 153, 307 and 523; and Nkom's 2020 Market Analysis, paragraph 141.

<sup>641</sup> See the Norwegian NCA's Merger Decision V2015-1, paragraphs 485–488 and the Norwegian NCA's Decision V2018-20, Section 10.2.2.

<sup>642</sup> See Nkom's 2016 Market Analysis, paragraph 135.

<sup>643</sup> Available at: <[http://berec.europa.eu/eng/document\\_register/subject\\_matter/berec/reports/?doc=171](http://berec.europa.eu/eng/document_register/subject_matter/berec/reports/?doc=171)>, accessed June 2020 (see Document No 1075494). The focus of BEREC's report was Market 5 of the 2008 Recommendation on relevant markets (wholesale broadband access market). BEREC also noted (see Section 3) that the expression "taken into account" used in the questionnaire sent to the NRAs means that an NRA explicitly considered the issue, but it does not necessarily mean that self-supply is ultimately included within the definition of the market by the NRA.

<sup>644</sup> See Notice on the definition of the relevant market, paragraph 53.

<sup>645</sup> Reply to the SO, paragraph 281.

<sup>646</sup> The Norwegian Ministry of Transport and Communications came to the same conclusion in its decision on Telenor's appeal against Nkom's 2016 SMP Decision; see Vedtak i klagesak om Nkoms vedtak om utpeking av tilbydere med sterk markedsstilling og pålegg om særskilte forpliktelser i markedet for tilgang til og samtaleopringering i offentlige mobilkommunikasjonsnett (tidligere Marked 15), 9 March 2018, page 24, available at: <[https://www.regjeringen.no/contentassets/0c8cc18666a1468889983a5a5b8aa303/vedtak\\_klagesak\\_telenor\\_090318.pdf](https://www.regjeringen.no/contentassets/0c8cc18666a1468889983a5a5b8aa303/vedtak_klagesak_telenor_090318.pdf)>, accessed June 2020.

<sup>647</sup> Commission's 2007 Explanatory Note; for the full reference: see footnote 191 above.

<sup>648</sup> Commission's 2007 Explanatory Note, Section 3.1 ("Self-supply"), third (and final) paragraph.

*justified to take the self-supply concerned into consideration for the sake of market delineation.*” The relevant section states further that inclusion of such self-supply is not justified if there are capacity constraints.<sup>649</sup> Telenor itself has claimed that Telia was not capacity-constrained and had agreements with a number of wholesale customers (see paragraph 929 below). According to the 2007 Explanatory Note, this would justify including self-supply in the present case. Moreover, the Authority notes that, in 2016, when concluding that it was necessary to include self-supply in order to give a correct picture of the market and relative strength at the wholesale level, Nkom *inter alia* referred to the 2007 Explanatory Note.<sup>650</sup>

492. In light of the above considerations, and notwithstanding Telenor’s arguments to the contrary, the Authority concludes that internal sales should be included in the market shares at the upstream level.

#### 9.2.1.3.3 *Market shares in the merchant market*

493. As set out in Section 9.2.1.3.2 above, Telenor submits that, if market shares are used to reflect market strength in the wholesale market in this case, they should only include external sales. Telenor claims that, based on its market shares in the merchant market, no dominant position can be found.

494. In its Reply to the SO,<sup>651</sup> Telenor provided market shares on a putative wholesale merchant market (thus not including internal sales) from 2007 to 2014, which are shown in Figure 8 below.

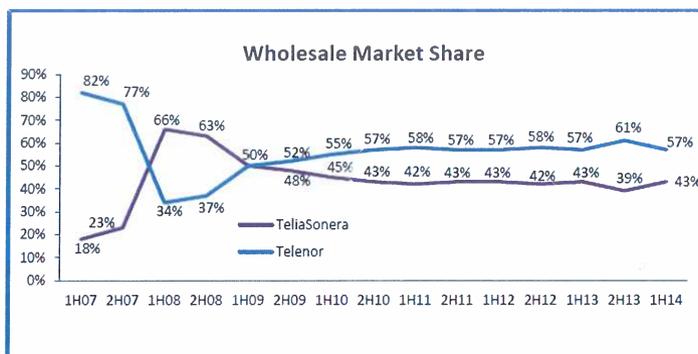
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<sup>649</sup> “However, this is not justified if alternative operators face capacity constraints, or their networks lack the ubiquity expected by access seekers, and/or if alternative providers have difficulty in entering the merchant market readily.”

<sup>650</sup> See Nkom’s 2016 Market Analysis, paragraph 135. In particular, Nkom referred to the latest version of the Commission’s Explanatory Note (dated 2014), where the third paragraph of Section 3.3 (“Self-supply”) is identical to the third paragraph of Section 3.1 of the Commission’s 2007 Explanatory Note, reported in paragraph 491; see the Commission’s 2014 Explanatory Note (“Explanatory Note to the Commission Recommendation on Relevant Product and Service Markets within the Electronic Communications Sector Susceptible to *Ex Ante* Regulation”, 9 October 2014, SWD(2014) 298), available at: <<https://ec.europa.eu/digital-single-market/en/news/explanatory-note-accompanying-commission-recommendation-relevant-product-and-service-markets>>, accessed June 2020.

<sup>651</sup> See Reply to the SO, Sections 4.3.6.2 and 4.3.6.3.

Figure 8: Wholesale market shares on the merchant market, as presented by Telenor



Source: Telenor's Reply to the SO, page 75.

495. According to Telenor, the fact that its market share was below Telia's<sup>652</sup> share from the second half of 2007 to the first half of 2009 contradicts the Authority's finding of dominance. Moreover, Telenor argues that the changes in its market share during the Period under Consideration – from a minimum of 34% (in the first half of 2008) to a maximum of 58% (in the second half of 2012) – are also incompatible with a finding of dominance.<sup>653</sup>
496. The Authority, however, disagrees with Telenor's characterisation of market shares on this putative wholesale merchant market, which excludes internal sales.
497. First, the Authority notes that, even excluding internal sales, on the basis of the figures provided by Telenor, Telenor's market share has been 50% or more, in all years during the Period under Consideration with the exception of 2008. In fact, Figure 8 above shows that Telenor's market share increased from 50% in the first half of 2009 to 58% in the second half of 2012. The Norwegian NCA found that Telenor's estimated market share

<sup>652</sup> Labelled as "TeliaSonera" in Figure 8.

<sup>653</sup> See Reply to the SO, Sections 4.3.6.2 and 4.3.6.3. Telenor also notes (Reply to the SO, paragraph 291) that, by not including ICE and Mobile Norway, the figures in Figure 8 necessarily overestimate Telenor's and Telia's market shares. The Authority recognises that there is some degree of over-estimation, but considers that it is not sufficiently material to impact upon its findings. As noted above, in the case of ICE, the company only had two small SPs as wholesale customers during the Period under Consideration, which means its presence on the merchant wholesale market was marginal. In the case of Mobile Norway, it should be noted that the company itself only provided access to its joint owners Tele2 and NwN (i.e. it did not have any external customers). In turn, NwN only had four small SPs as wholesale customers, whereas Tele2 had none. See, on this point, the Norwegian NCA's Merger Decision V2015-1 (paragraph 498 and footnote 289) and the letter from Telia to the Authority of 30 August 2016 (Document No 816102, Section 2.1, page 2). As a result, the combined presence of Mobile Norway and its joint owners on the merchant wholesale market was also marginal. See also Section 9.2.2.2 below on the Authority's conclusion that neither ICE nor Mobile Norway exerted a material competitive constraint on the relevant wholesale market during the Period under Consideration.

on the wholesale market excluding internal sales (based on minutes) was the following: 58.6% in 2010, 60.7% in 2011 and 58.6% in 2012.<sup>654</sup> As indicated above, market shares provide a useful indication of the market structure and of the competitive importance of the various undertakings active on the market. Market shares above 50% are in themselves, and save in exceptional circumstances, evidence of the existence of a dominant position.<sup>655</sup>

498. Second, according to the figures provided by Telenor, set out in Figure 8 above, Telenor's share on the merchant market was below 50% only in 2008, when it was equal to 34% in the first half of the year and 37% in the second half, down from 77% in the second half of 2007. As explained in Section 9.2.2.3 below, this significant (albeit temporary) drop in Telenor's share was due to Tele2's switch to Telia, after the company failed to reach an agreement with Telenor. In the Authority's view, as also explained below, this isolated example – although significant in volume – is not sufficient to conclude that Telenor was not dominant during the Period under Consideration. Moreover, Telenor's loss of Tele2 to Telia was offset by NwN becoming one of Telenor's wholesale customers.
499. The Authority concludes that, even on a putative merchant market which excludes internal sales, Telenor's market shares during the Period under Consideration, as set out in paragraphs 494 and 497 above, are in themselves clear evidence of the existence of a dominant position during that period.

#### 9.2.1.4 *Conclusion on market shares*

500. In light of the foregoing, the Authority concludes that the high and stable market shares considered above (even those on the merchant market) provide a strong indication that, during the Period under Consideration, Telenor held a dominant position on the wholesale market for access and origination services on public mobile telephone networks in Norway.

### 9.2.2 *Competition among MNOs during the Period under Consideration*

#### 9.2.2.1 *Introduction*

501. As will be shown below, contrary to what Telenor argues,<sup>656</sup> competition on the wholesale market was not effective during the Period under Consideration. In particular, as explained further in this section, the Authority concludes that Mobile Norway, ICE and Telia were unable to constrain Telenor's dominant position (as indicated on the basis of market shares discussed in Section 9.2.1 above) on the relevant wholesale market in

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<sup>654</sup> See the Norwegian NCA's Decision V2018-20, footnote 553.

<sup>655</sup> See judgment of 19 April 2016 in Case E-14/15 *Holship Norge AS* [2016] EFTA Ct. Rep. 240, paragraph 83; judgment of 13 February 1979, *Hoffmann-La Roche*, 85/76, EU:C:1979:36, paragraph 41, and judgment of 3 July 1991, *AKZO*, 62/86, EU:C:1991:286, paragraph 60.

<sup>656</sup> Telenor contends that three other providers (i.e. the MNOs Telia, Mobile Norway (jointly owned by NwN and Tele2) and ICE) of mobile access and origination services to MVNOs and SPs remained active during most of the Period under Consideration. According to Telenor, the negotiations performed and contracts concluded in the wholesale market show that there was efficient competition for wholesale customers throughout the Period under Consideration; see Reply to the SO, Section 4.3.7.

Norway during the Period under Consideration. The Authority also concludes, contrary to what Telenor claims,<sup>657</sup> that other MNOs did not have the ability and/or incentives to expand their capacity to supply mobile access and origination services.

### 9.2.2.2 *Competition from Mobile Norway and ICE*

502. The Authority considers, contrary to Telenor's view,<sup>658</sup> that both Mobile Norway and ICE were only marginal competitors in the relevant wholesale market during the Period under Consideration. Neither Mobile Norway nor ICE was able to exert a significant competitive constraint on Telenor. The Norwegian NCA reached the same conclusion in a decision finding Telenor to have abused its dominant position on the same relevant wholesale market, for the period between 18 August 2010 and 30 June 2014 (i.e. the period which was relevant for the NCA's case and which partially overlaps with the Period under Consideration in the present case).<sup>659</sup>
503. To start with Mobile Norway, the Authority recalls that the coverage of its network was limited during the Period under Consideration.<sup>660</sup> Consequently, Mobile Norway, and its parents NwN and Tele2, could not provide nationwide wholesale services based solely on their own network. They were therefore dependent on a wholesale agreement with either Telenor or Telia to be able to provide nationwide wholesale services during the Period under Consideration. This was also the case on the retail market. While rolling out Mobile Norway's own mobile network in Norway during the Period under Consideration, Mobile Norway's shareholders NwN and Tele2 relied on access agreements with the established MNOs (respectively Telenor and Telia) to offer retail mobile communications services with a nationwide coverage to their customers. It is indicative that Tele2 and NwN used Mobile Norway to carry only parts of their own customer traffic (as and when such traffic could be moved onto Mobile Norway's

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<sup>657</sup> Telenor argues that other MNOs (Telia, Mobile Norway (jointly owned by NwN and Tele2) and ICE) had the ability and incentives to expand their capacity to supply mobile access and origination services and that they were therefore credible bidders for wholesale contracts throughout the Period under Consideration; see Section 4.3.3 of the Reply to the SO.

<sup>658</sup> See Reply to the SO, Sections 4.3.3.3 and 4.3.3.4. See also Annex 1 to the Reply to the SSO – CRA Comments, Section 4.2.

<sup>659</sup> See the Norwegian NCA's Decision V2018-20, Section 10.2.4.2. This decision was confirmed by the Norwegian Competition Tribunal, albeit the latter slightly reduced the infringement period, i.e. from 18 August 2010 to 6 December 2013 (see the Norwegian Competition Tribunal's Decision V03/2019).

<sup>660</sup> According to Telenor (see paragraph 247 of the Reply to the SO), Mobile Norway covered less than 17% of the population in July 2009, around 42% in January 2012 and around 65% by early 2013. In paragraph 434 of its draft 2014 Market Analysis, Nkom notes that Mobile Norway had a population coverage of 42% at the beginning of 2012. According to the Norwegian Ministry of Transport and Communications, NwN's and Tele2's coverage in December 2012 was around 60% of the population (See Document No 680811, the Norwegian Ministry of Transport and Communications' Decision of 20 December 2012, page 8). Both Nkom and the Norwegian Ministry of Transport and Communications considered that, even with a network coverage of 75%, it was not possible to compete effectively in the wholesale market (See Nkom's 2016 Market Analysis, paragraph 206 and Document No 680811, the Norwegian Ministry of Transport and Communications' Decision of 20 December 2012, Section 6.3, page 10). It is worth noting that Mobile Norway only reached a coverage of 75% at the end of 2013, that is one year after the end of the Period under Consideration (see paragraph 251 of Nkom's draft 2014 Market Analysis) and stopped further build-out following its unsuccessful bid for a frequency licence in the spectrum auction that took place in December 2013 (see paragraph 76 above).

network). For example, at the end of September 2012 roughly 30% of Tele2's traffic volume was on its own (i.e. Mobile Norway's) network.<sup>661</sup> In the Authority's view, this shows that, even towards the end of the Period under Consideration, Tele2 was still heavily dependent on external supplies, which limited its possibilities to compete on the wholesale market. The Norwegian NCA noted that even in 2014 more than half of Tele2's total market share (of around 18%) in the retail markets relied on wholesale access purchased from Telenor and Telia.<sup>662</sup> This shows that, even in 2014, Tele2 was still heavily dependent on external suppliers. According to Nkom, in August 2010, 80% of NwN's traffic was carried on Telenor's network.<sup>663</sup>

504. Mobile Norway's lack of nationwide coverage (and the resulting dependence on NR agreements) severely limited its ability (and that of its parents) to compete effectively in the wholesale market. This was also noted by Nkom in 2010.<sup>664</sup> This is further evidenced by the fact that Mobile Norway and its parents only had a marginal presence on the relevant wholesale market during the Period under Consideration. Mobile Norway only provided access (self-supply) to its joint owners, NwN and Tele2. In turn, Tele2 had no external wholesale customers, whereas NwN only had four small SPs to which it provided wholesale access.<sup>665</sup> Moreover, the wholesale agreement that NwN signed in 2008 with Telenor made it more difficult for NwN to provide access to MVNOs, because, in that case, Telenor would be entitled to renegotiate its wholesale prices.<sup>666</sup> An important part of the wholesale market was therefore made riskier and less economically attractive for NwN.<sup>667</sup>

<sup>661</sup> Document No 1114347 (transcript of a conference call of 18 October 2012 regarding the *Tele2 Interim Report January – September 2012* (available via the following link: <<https://www.tele2.com/investors/reports-and-presentations>>, accessed June 2020)), page 6, where Tele2 states the following regarding its network roll-out in Norway: “*Today [end September 2012] we have roughly 45% of Norway being built out on our own network and roughly 30% of the traffic volume is on our network, and we’re aiming for 75% of Norway to be built out over the third network.*”

<sup>662</sup> See the Norwegian NCA's Merger Decision V2015-1, paragraph 515.

<sup>663</sup> See Nkom's 2010 Market Analysis (confidential version), paragraph 208. The number of minutes carried on Mobile Norway's network had increased by 6% at the end of 2013, but part of the increase was because Tele2's traffic was included (following the merger between Tele2 and NwN); see Nkom's draft 2014 Market Analysis, paragraph 242.

<sup>664</sup> In 2010, Nkom concluded that newly established providers in the wholesale market exerted a reduced disciplinary effect on established providers, because the former depended on the established providers' infrastructure for access (see Nkom's 2010 Market Analysis, page 5). See also paragraph 104 of Nkom's 2010 Market Analysis: “*In the decision of 19 May 2009 following Network Norway's appeal of [Nkom's] decision of 17 November 2008, the Ministry of Transport and Communications stated that 40 per cent of the population coverage, as the requirement was in Mobile Norway's frequency licence, would be too little to constitute an adequate competitor to today's two nationwide networks.*” See also the Norwegian Ministry of Transport and Communications' Decision of 20 December 2012 (see Document No 680811), Section 6.3, page 10, where the Ministry states that even with a network coverage of 75%, it was not possible to compete effectively in the wholesale market.

<sup>665</sup> See footnote 653 above.

<sup>666</sup> See Document No 657260 – EES 27, National Roaming Agreement between Telenor and NwN of 3 April 2008, Clause 3.2 (see page 10/44).

<sup>667</sup> See also Nkom's 2010 Market Analysis, paragraphs 349 of the confidential version (see Document No 1135688): “*The limitation in Telenor's reference offer on national roaming means that an important part of the*

505. As a result, Mobile Norway's wholesale market share remained very low during the Period under Consideration, amounting to 1% in 2009 and 6% at the end of 2012.<sup>668</sup>
506. As far as ICE is concerned, its network also did not have nationwide coverage during the Period under Consideration.<sup>669</sup> In addition, it could offer wholesale access to data services only, given the specific technology ICE was using at the time.<sup>670</sup> The Authority considers that this fact severely limited ICE's attractiveness as a provider of access and call origination services on public mobile telephone networks for access buyers that were interested in offering ordinary mobile communications services in the retail market.<sup>671</sup> ICE's limitation was even more relevant during the Period under Consideration, when voice services were still seen as an important component of the retail offering.<sup>672</sup>
507. This limitation also meant that, if wholesale customers chose ICE for their wholesale data needs, they would spread their total wholesale traffic among several providers (since they would need an additional wholesale supplier for their non-MBB requirements). This

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*market for an MNO is shut off because an MNO with a national roaming agreement with Telenor cannot offer MVNOs an equal value agreement compared with MVNO agreements with NetCom or Telenor. [...] To enable Network Norway to enter into real negotiations with potential buyers of MVNO access, the company must have clarity in its own framework conditions. [Nkom] therefore believes the clause on Telenor's right to renegotiation in case Network Norway aligns with MVNOs greatly weakens Network Norway's opportunities to enter into an agreement on sales of such forms of access. The clause can also be seen as an obligation for Network Norway to notify Telenor if the company should wish to enter into agreements to offer MVNO access. The clause thus seems to have the effect of largely limiting Network Norway's opportunities to enter into agreements with buyers of MVNO access."*

<sup>668</sup> See Table 9 at paragraph 466 above.

<sup>669</sup> See press release of 11 May 2010 (available at: <[https://news.cision.com/no/ice-net/r/ice-norge-i-sterk-vekst\\_c490146](https://news.cision.com/no/ice-net/r/ice-norge-i-sterk-vekst_c490146)>, accessed June 2020), where ICE states that its network only covered 75% of the territory in Norway. At page 23 of its Reply to the LoF, Telenor argues that ICE managed to capture "a quite substantial part" of the relevant retail market with that coverage. However, in the Authority's view this does not alter its conclusion that ICE was only a marginal competitor in the relevant wholesale market, for the reasons set out in paragraphs 506–509.

<sup>670</sup> See Nkom's 2010 Market Analysis, paragraph 95.

<sup>671</sup> Contrary to what Telenor claims (see Annex 1 to the Reply to the SSO – CRA Comments, paragraph 110), this does not amount to an inconsistency with a relevant retail market consisting of residential stand-alone MBB. As demonstrated in Section 8.4.4.2 above, at the retail level, MBB was bought separately from other mobile communications services by residential customers. On the contrary, at the wholesale level, wholesale customers purchased voice, SMS/MMS and mobile data services together, as part of a bundle. ICE was therefore not a good alternative to Telenor or Telia's wholesale input for wholesale customers. Such wholesale customers could indeed provide MBB services on the basis of ICE's wholesale input, but in such cases they would also need to conclude a wholesale agreement with either Telenor or Telia in order to be able to provide ordinary mobile communications services in the retail market. This explains why ICE was only a marginal player in the relevant wholesale market during the Period under Consideration.

<sup>672</sup> See paragraph 287 of the Reply to the SO, where Telenor acknowledges that "call origination was a driver in the first part of the period of investigation, when mobile data communication was not yet decisive for access seekers in their competition on the retail level". The Authority considers that also during the second part of the Period under Consideration mobile calls remained an important service.

in turn meant that they were entitled to lower discounts under the prevailing discount scales.<sup>673</sup> This resulted in an additional handicap for ICE.

508. As evidence of ICE's limited appeal as a provider of wholesale access, the Authority notes that, according to information provided by Telenor,<sup>674</sup> ICE had only two small wholesale customers (Hello and Com4) during the Period under Consideration, one of which only entered the market in late 2011. Moreover, those two customers had wholesale agreements also with Telenor and/or Telia in addition to the agreement they had with ICE.<sup>675</sup> In the Authority's view, this shows that ICE was not a strong competitor on the wholesale market (given its inability to provide all relevant services, i.e. voice, messaging and data services).
509. The Authority's view that ICE was only a marginal competitor in the relevant wholesale market is further supported by Nkom's assessment in 2010.<sup>676</sup> Tellingly, at that time, Nkom only listed two nationwide operators on the supply-side (Telenor and Telia) and, in respect of ICE, noted that "*it is highly unlikely that Ice.net will contribute to any degree to competition at the wholesale level in the market for access and origination on mobile networks within the time horizon of the analysis.*"<sup>677</sup> Even as recently as 2016, Nkom noted that it was difficult for ICE to establish an attractive offer in the wholesale market based on the terms of its access agreement with Telia and concluded that there was not sufficiently clear evidence that ICE would be able to discipline the established operators on the supply side (i.e. Telenor and Telia).<sup>678</sup>
510. Moreover, for the same reasons as above and contrary to Telenor's claims,<sup>679</sup> the Authority also concludes that neither NwN and Tele2 (through their jointly-owned company Mobile Norway) nor ICE were able to *expand* coverage and capacity in a timely and sufficient manner. The Authority recalls that Mobile Norway's network was in the process of being rolled out. Even if its coverage increased progressively, it remained limited during the entire Period under Consideration. ICE also had no nationwide coverage and in addition its network enabled wholesale access to data services only. Even if ICE were able to expand its coverage and capacity, the fact that it could not offer voice

<sup>673</sup> See Nkom's 2010 Market Analysis, paragraph 545, where it noted the following: "*In addition, the use of discount scales, which are applicable to all forms of access, will be a factor that makes it less attractive to distribute traffic among several sellers of access.*"

<sup>674</sup> Figure 7 at paragraph 310 (page 81) of the Reply to the SO.

<sup>675</sup> See Figure 7 at paragraph 310 (page 81) of the Reply to the SO. In particular, Com4 had an agreement with Telia in addition to the one with ICE (see Annex 3 to Nkom's 2016 SMP Decision, pages 20 and 21; available at: <<https://www.eftasurv.int/cms/sites/default/files/documents/gopro/2083-M15%20Annex%203%20Results%20from%20the%20public%20consultation%20%28public%29.pdf>>, accessed June 2020). Hello had an agreement with both Telia and Telenor in addition to the one with ICE (see Nkom's 2010 Market Analysis, footnote 18; see also Annex 2 to Nkom's 2010 SMP Decision, pages 4 and 5; available at: <<https://www.eftasurv.int/cms/sites/default/files/documents/gopro/270-566567.PDF>>, accessed June 2020).

<sup>676</sup> See Nkom's 2010 Market Analysis, Section 3.3.

<sup>677</sup> Nkom's 2010 Market Analysis, paragraph 95.

<sup>678</sup> See Nkom's 2016 Market Analysis, Section 4.3.8.

<sup>679</sup> Reply to the SO, Sections 4.3.3.3 and 4.3.3.4.

services remained a severe handicap during the entire Period under Consideration. Finally, the Authority refers to the switching costs discussed in paragraphs 528–540 below, which made it difficult for NwN, Tele2 and ICE to expand on the relevant wholesale market.

511. In light of the above considerations, the Authority concludes that neither Mobile Norway (together with its parents Tele2 and NwN) nor ICE exerted a significant competitive constraint on Telenor in the relevant wholesale market during the Period under Consideration.

### 9.2.2.3 Competition between Telenor and Telia

512. Telia was Telenor’s only real competitor in the relevant wholesale market during the Period under Consideration.<sup>680</sup> However, contrary to what Telenor claims,<sup>681</sup> competition between Telenor and Telia on the relevant wholesale market was limited during the Period under Consideration.

513. In the Authority’s view, the changes of access provider by Tele2 and NwN, the largest wholesale customers,<sup>682</sup> which occurred in 2007/early 2008 and are described in the following paragraphs,<sup>683</sup> do not represent evidence of effective competition on the wholesale market.

514. Tele2 first signed an MVNO agreement with Telenor in September 2002<sup>684</sup> (entry into force on 31 March 2003), which granted the parties reciprocal access to their respective mobile networks in Sweden and Norway.<sup>685</sup> The agreement had a duration of five years, until 31 March 2008.<sup>686</sup> In September 2006, 18 months prior to the expiry of its agreement with Telenor, Tele2 sought to renegotiate the agreement, requesting a combined MVNO/NR agreement.<sup>687</sup> According to Tele2, the negotiations did not lead to an acceptable offer from Telenor, and no new agreement was reached.<sup>688</sup> In the first half

<sup>680</sup> In 2010, Nkom came to the same conclusion: “*At the wholesale level, Telenor has only one real challenger in the short to medium term, in the form of NetCom [= Telia]*”; see Nkom’s 2010 Market Analysis, paragraph 451.

<sup>681</sup> See Reply to the SO, Section 4.3.7. See also Annex 1 to the Reply to the SSO – CRA Comments, Section 4.3.

<sup>682</sup> During the Period under Consideration, Tele2 and NwN were by far the largest wholesale customers with an aggregate share (including traffic on their jointly owned network) of around 16% of all traffic at the end of 2012; see Document No 788755, presentation by Tele2 to the Authority on 7 August 2013, page 5. See also the Norwegian NCA’s Decision V2018-20, paragraph 621, which refers to Nkom as a source: Nasjonal kommunikasjonsmyndighet, *Tallgrunnlag ekomarkedet 2014 revidert 02.09.2015* (available at: <<https://ekomstatistikken.nkom.no/files/ekomportal/2014/Det%20norske%20ekomarkedet%202014.pdf>> with supporting figures available at: <<https://ekomstatistikken.nkom.no/#/download>>, accessed June 2020).

<sup>683</sup> See also paragraph 471 above.

<sup>684</sup> See Document No 1135193.

<sup>685</sup> Tele2’s MVNO agreements are described in Section 4.2.9.1 of Nkom’s 2010 Market Analysis. See also Document No 788755, presentation by Tele2 to the Authority on 7 August 2013, pages 39–44.

<sup>686</sup> See Document No 788755, presentation by Tele2 to the Authority on 7 August 2013, page 39.

<sup>687</sup> See, for example, Document No 680066, Telenor minutes from meeting with Tele2 dated 31 October 2006. See also Document No 788755, presentation by Tele2 to the Authority on 7 August 2013, page 40.

<sup>688</sup> See Document No 788755, presentation by Tele2 to the Authority dated 7 August 2013, page 40.

of 2007, Tele2 entered into similar negotiations with Telia, which requested a six-week period of exclusive negotiations before agreeing to negotiate.<sup>689</sup> Tele2 signed an MVNO agreement with Telia on 11 May 2007,<sup>690</sup> with an initial term of four years, beginning on 31 March 2008 (the date on which Tele2's agreement with Telenor came to an end).<sup>691</sup> The agreement contained a minimum purchase obligation and a clause prohibiting Tele2 from offering its subscribers an alternative network for mobile communications services in Norway.<sup>692</sup> The agreement provided for severe penalties if the exclusivity clause was breached (and traffic was transferred to Telenor) or if the minimum purchase obligation was not met.<sup>693</sup>

515. NwN signed a NR agreement with Telia in January 2006, although the agreement did not grant access to the 3G network and did not appear to be well suited to the market developments at the time, according to Nkom.<sup>694</sup> In autumn 2006, NwN approached Telenor to seek a NR agreement. Telenor refused NwN's request, arguing that it was not obliged to satisfy NwN's request, given the company's existing NR agreement with Telia.
516. NwN then filed a complaint with Nkom. The Norwegian NRA decided that, by refusing NwN's request, Telenor had breached its obligation to grant access and that it could not prevent NwN from having a NR agreement with both Telia and Telenor simultaneously

<sup>689</sup> See Document No 788755, presentation by Tele2 to the Authority dated 7 August 2013, page 41.

<sup>690</sup> See Document No 847815, MVNO agreement between Telia and Tele 2 dated 11 May 2007.

<sup>691</sup> See Document No 788755, presentation by Tele2 to the Authority dated 7 August 2013, page 41. See also Document No 847815, MVNO agreement between Telia and Tele 2 dated 11 May 2007, Annex B2 "prices", Clause 1 (at page 36/70): "*The prices set out below have the assumption that 100% of COMPANY's existing traffic is migrated on to the NETCOM's Network at the latest within April 1, 2008 according to the migration plan set out below*".

<sup>692</sup> See Document No 788755, presentation by Tele2 to the Authority dated 7 August 2013, page 41. Regarding the exclusivity clause, see Tele2's MVNO agreement with Telia (Document No 847815), Clauses 3.1 and 3.3 (see pages 8–9/70). Regarding the minimum purchase obligation, see annex B2 "prices", Clause 2 (see page 36/70). See also annex B12 "option on national roaming services", Clause 4 "purchase obligation" (see page 56/70) and annex B2 "prices" (which replaces the former annex B2 "prices", applicable from 3 January 2010), Clause 2.1 (see page 65/70).

<sup>693</sup> See Document No 788755, presentation by Tele2 to the Authority dated 7 August 2013, page 41: "*Severe penalties if exclusivity clause is breached (and traffic is transferred to Telenor) or minimum purchase obligation is not met.*" Regarding the minimum purchase obligation, see Document No 847815, MVNO agreement between Telia and Tele 2 dated 11 May 2007, Annex B2 "prices", Clauses 1 and 2 (at page 36/70): "*The prices set out below have the assumption that 100% of COMPANY's existing traffic is migrated on to the NETCOM's Network at the latest within April 1, 2008 according to the migration plan set out below*"; "*if the monthly traffic volume measured over one month after the commencement of the Initial term goes below the thresholds set out below NETCOM is entitled to raise the prices (voice, SMS and Data) with 5% [...]*". Regarding the exclusivity clause, see Clause 17 (e) at page 17/70: "*Either Party may terminate this Agreement according to this Clause 17 with immediate effect by written notice to the other party. [...] The following subsections constitute each of them a material breach of the Agreement: [...] (e) if COMPANY actively transfers its traffic and/or customers to another communications network under the Initial Term without having terminated the Agreement according to the terms of this agreement*". See also Clause 18 "Effects of termination of the agreement" (see page 18–19/70) and Clause 21 "Liability" (see page 20–21/70).

<sup>694</sup> NwN's NR agreements are described in Section 4.2.9.3 of Nkom's 2010 Market Analysis.

(i.e. exclusivity should not be imposed).<sup>695</sup> Telenor filed an appeal against Nkom's decision with the Norwegian Ministry of Transport and Communications. While the appeal was pending, NwN terminated its agreement with Telia and proceeded to sign a NR agreement with Telenor in April 2008.<sup>696</sup> The subsequent decision by the Ministry set aside Nkom's decision without substantive discussion, since there was no longer a legal basis for instructing Telenor to comply with the request as it had in the meantime entered into an agreement with NwN.<sup>697</sup>

517. In brief, in 2007/early 2008, following negotiation processes and legal disputes, the two largest wholesale customers (Tele2 and NwN) changed their existing access provider. In theory, as claimed by Telenor,<sup>698</sup> these instances of switching could be consistent with a finding that there was, at that time, effective competition on the wholesale market. In practice, however, the Authority considers that this was not the case, as explained in the following paragraphs.
518. First, as noted by Nkom, there are indications that regulatory access obligations imposed on Telenor have been of importance to the entry into the agreements.<sup>699</sup> However, despite the fact that these regulatory access obligations might have had some disciplining effect, as noted by Nkom, even then, the manner in which the negotiations were conducted by

<sup>695</sup> See Nkom's Decision of 20 September 2007; as also summarised in Nkom's 2010 Market Analysis, Section 4.2.9.3.

<sup>696</sup> In spite of Nkom's Decision, the contract between NwN and Telenor included an exclusivity clause which prohibited NwN from obtaining national roaming from any other network operator with the same coverage as Telenor (i.e. Telia); see Document No 657260 – EES 27, National Roaming Agreement between Telenor and Network Norway of 3 April 2008, Clause 1.3 (e) (exclusivity), at page 6/44. The contract could not be terminated before 1 January 2010, and then only with a 12-month notice period (see Document No 657260 – EES 27, Clause 13.2 at pages 18–19/44). Finally, the contract made it difficult for NwN to sign up MVNOs, because, in that case, Telenor would become contractually entitled to demand a renegotiation of the condition and terms (see Document No 657260 – EES 27, Clause 3.2 at page 10/44). According to Nkom, the fact that NwN could not sign up MVNOs without Telenor becoming entitled to renegotiate prices deprived NwN of an important part of the wholesale market; see Nkom's 2010 Market Analysis (confidential version), paragraph 349.

<sup>697</sup> See the Decision of the Norwegian Ministry of Transport and Communications in Case 07/1660-KAT, dated 5 May 2008; available at: [https://www.regjeringen.no/globalassets/upload/sd/vedlegg/telekommunikasjon/klagesaker\\_tele/vedtak\\_200802309\\_159964-telenor\\_asa.pdf](https://www.regjeringen.no/globalassets/upload/sd/vedlegg/telekommunikasjon/klagesaker_tele/vedtak_200802309_159964-telenor_asa.pdf), accessed June 2020. See also paragraph 344 of Nkom's 2010 Market Analysis.

<sup>698</sup> See Section 4.3.2 of the Reply to the SO.

<sup>699</sup> See Nkom's 2010 Market Analysis, paragraph 401. On the importance of regulation in the wholesale market, in respect of the original agreement signed by NwN with Telia in 2006, while Nkom noted that Telia was not subject to any obligation to provide access, it also observed that “it is doubtful whether [Telia] would at all have entered into an agreement with Network Norway unless Telenor had already had an obligation of access imposed on it.” (paragraph 340 of Nkom's 2010 Market Analysis). This view was shared by consultancy firm Econ Pöry: “[Telia] has voluntarily entered into a roaming agreement with Network Norway, but would hardly have done so if the authorities had not already issued a directive to Telenor.” See Econ Pöry's report 2008–024, *Mobil roaming og investeringsincentiver* (Mobile Roaming and Investment Incentives), page 2, quoted in paragraph 340 of Nkom's 2010 Market Analysis.

Telenor and Telia, and the terms of the wholesale agreements indicate that there was no effective competition and limited buyer power.<sup>700</sup>

519. Moreover, commenting specifically on the NR agreement that NwN signed with Telenor, Nkom found that *“for a period Telenor actually exercised denial of access vis-à-vis Network Norway. There is furthermore reason to emphasise that Telenor maintained the denial of access after [Nkom] in decisions said that it was [in] conflict with the current decision in market 15. The agreement was signed because Network Norway cancelled the agreement with [Telia], not that Telenor complied with the [Nkom’s] clear standpoint. In [Nkom’s] opinion, the agreement on national roaming between Network Norway and Telenor supports a view of a limited degree of buyer power and strong asymmetry in the relative strength between the agreement parties.”*<sup>701</sup>
520. The Authority considers that this episode shows also that Telenor was not materially constrained by Telia. As set out in paragraph 515 above, Telenor initially did not even want to compete with Telia to have NwN as a wholesale customer. It simply initially refused NwN’s access request. A further indication of Telenor’s ability to behave independently of its main rival (Telia), as well as of its customers (NwN in this specific case), is the fact that Telenor imposed an exclusivity clause on NwN for the duration of the contract, which prohibited the latter from obtaining national roaming from any other network operator with the same coverage as Telenor (i.e. Telia),<sup>702</sup> in spite of Nkom’s decision that, *inter alia*, exclusivity should not be imposed.<sup>703</sup> As further evidence that Telenor was able to behave independently of rivals and customers, it should be recalled that the agreement with NwN enabled Telenor to demand to renegotiate access prices if NwN were to host an MVNO customer, thus foreclosing an important part of the market for NwN.<sup>704</sup>
521. Therefore, while the Authority recognises that regulatory intervention had some degree of impact on the provision of wholesale access by Telenor and, in turn, Telia, it considers that this did not sufficiently impact Telenor’s ability to act independently during the Period under Consideration. This is confirmed by the fact that, notwithstanding regulatory intervention, Nkom has consistently found Telenor to be dominant, even as recently as in its 2016 and 2020 market analyses.<sup>705</sup> Indeed, in 2016, Nkom concluded

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<sup>700</sup> See Nkom’s 2010 Market Analysis, paragraph 401: “[...] the agreements reached cannot be taken as evidence that the market is tending towards competition. In [Nkom’s] view, there are several factors, including the terms of the agreements, indicating a small degree of buyer power and competition at the wholesale level.”

<sup>701</sup> Nkom’s 2010 Market Analysis, paragraph 347.

<sup>702</sup> Document No 657260 – EES 27, National Roaming Agreement between Telenor and Network Norway of 3 April 2008, Clause 1.3, (e) (exclusivity).

<sup>703</sup> See paragraph 516 above.

<sup>704</sup> Document No 657260 – EES 27, NR Agreement between Telenor and Network Norway of 3 April 2008, Clause 3.2 (see page 10/44). See also paragraph 504 above.

<sup>705</sup> See footnote 599 above.

that “*Telia’s presence has not been a sufficiently disciplinary force*” on the wholesale market.<sup>706</sup>

522. Second, Telia had limited incentives to compete strongly on the wholesale market, given its nature as a vertically-integrated company and the importance of its downstream operations.<sup>707</sup> In particular, it should be noted that, if Telia expanded on the wholesale market by offering better terms to its wholesale customers, these same customers would have had the possibility to compete more fiercely on the downstream market and thus threaten the profitability of Telia’s downstream operations. Nkom considered that this was still the case in 2016: “*Telenor’s wholesale revenue constitutes a relatively small share of the company’s total revenue, compared with the retail sales revenue. Telenor’s incentives to pursue and achieve competitive advantages in the retail market, rather than selling wholesale access, must thus be assumed to be strong. Since Telenor is widely present in various retail s[egments] (business, residential and M2M), in most cases all types of access will entail direct competition with own retail activities. On this basis, Telenor must be assumed to have limited incentives to compete with Telia on providing access, since terms that are too attractive will increase the competitiveness of access buyers at the retail level. In the same way, Telia will also encounter increased competition at the [retail] level by giving too advantageous access terms to external parties, and it must be assumed that Telia will not have any significantly stronger incentives than before to compete with Telenor in giving access.*”<sup>708</sup> The Norwegian NCA came to the same conclusion in 2015 when it assessed the acquisition of Tele2 by Telia<sup>709</sup> and in 2018 when it concluded that Telenor had abused its dominant position.<sup>710</sup> The

<sup>706</sup> Nkom’s 2016 Market Analysis, paragraph 431. See also paragraph 477, where Nkom concludes that Telenor is not disciplined by any other wholesale supplier: “*In contrast to most other countries in Europe, access agreements in Norway are established under a regulated regime. Nkom believes that the sector-specific regulation in Norway has influenced the establishment and terms of these agreements. This is illustrated by several cases that Nkom has worked on in recent years. For Nkom there is little indication that access buyers have a significant buyer market, or that Telenor is disciplined by other operators on the supply side in the relevant market. The cases are rather an expression of a market with limited market dynamics in which sector-specific ex-ante regulation has been of significance to the establishment and terms of access agreements. Nor can Telia’s standard offer for MVNO access be said to express competition, since it was established as a consequence of the acquisition of Tele2. According to Telia, the offer was conditional on the acquisition’s approval by the Competition Authority.*”

<sup>707</sup> Telia was Telenor’s closest competitor at the downstream level.

<sup>708</sup> See Nkom’s 2016 Market Analysis, paragraph 625. As regards the tension between profitability at the upstream and downstream levels resulting from selling capacity to external wholesale customers, see also the Norwegian NCA’s Merger Decision V2015-1, paragraphs 485–488 and 515, and the Norwegian NCA’s Decision V2018-20, Section 10.2.2.

<sup>709</sup> See the Norwegian NCA’s Merger Decision V2015-1, paragraph 515.

<sup>710</sup> See the Norwegian NCA’s Decision V2018-20, Section 10.2.4.1.3, and also paragraphs 271 and 279, where reference is made to respectively an internal Telenor e-mail of 29 May 2009 and an internal NwN note, which, in the Authority’s view, confirm Telia’s limited incentives to compete with Telenor on the relevant wholesale market. In an internal Telenor e-mail sent on 29 May 2009 during negotiations with NwN regarding prices for access to Telenor’s network, it is stated that “*I don’t think Netcom [i.e. Telia] will offer NwN prices anywhere near the prices they are asking for. [...] In our opinion, it is not in our interest to change the current agreement [with NwN].*” (Translation by the Authority of the following statement: “*Jeg tror heller ikke NetCom vil gi NwN priser i nærheten av det de ber om. [...] Alt i alt mener vi derfor at vi er best tjent med å ikke å gjøre endringer i avtalen på disse områdene.*”). Furthermore, in its assessment of the same negotiations, NwN in an internal note sent to its board stated that “*Netcom (i.e. Telia) will not offer us conditions we can use to play them (i.e. Telenor*

Authority recalls in this respect Telenor's internal documents quoted in paragraphs 485 and 486 above.

523. Third, the Authority considers that the changes of access provider which occurred in 2007/early 2008 (i.e. Tele2 switching from Telenor to Telia; and, NwN, from Telia to Telenor) remained isolated episodes. In fact, contrary to what Telenor claims,<sup>711</sup> during the Period under Consideration, switching was minimal in the wholesale market, which is consistent with the conclusion that competition between Telenor and Telia was limited.
524. In particular, as can be seen in Figure 9 below, there was no more switching by the two largest wholesale customers (i.e. Tele2 and NwN) after the switching in 2007/early 2008 (which, as described above, does not in the Authority's view represent evidence of effective competition on the wholesale market).

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and Telia) out against each other in order to receive lower prices from Telenor.” (Translation by the Authority of the following statement: “Dette betyr at Netcom ikke vil være en kommersiell part som sikrer oss bedre priser fra Telenor ved å spille de opp mot hverandre i forhandlinger.”)

<sup>711</sup> See, in particular, Section 4.3.7.5 of the Reply to the SO and Figure 7 on page 81 (reproduced in paragraph 524 below as Figure 9). In its Reply to the SO (paragraph 310), Telenor argues that Figure 7 is incomplete since it only includes switching between Telenor, Telia and ICE, and does not include wholesale agreements entered into by MVNOs and SPs. The Authority, however, considers that this figure provides sufficient information for an accurate assessment, since it includes all the MNOs active on the supply side and all the main wholesale customers on the demand side (therefore, even if some small SPs were not included, this would not invalidate the findings regarding lack of switching, given the low volumes purchased by small SPs).



528. Further, the Authority considers that even if, as Telenor submits,<sup>714</sup> Telia had spare capacity<sup>715</sup> and the ability to invest in additional capacity during the Period under Consideration (and that it made substantial investments to develop its network<sup>716</sup>), this does not mean that Telia could easily expand and compete effectively with Telenor for wholesale contracts. On the contrary, the relevant wholesale market in this case is characterised by significant barriers to expansion, specifically in the form of switching costs that wholesale customers had to incur when changing access provider. In addition, as shown in paragraph 522 above, Telia had limited incentives to compete aggressively with Telenor on the relevant wholesale market.
529. For example, according to Nkom in 2010 and 2016, while switching access provider did not entail high direct<sup>717</sup> costs for an NRO or MVNO,<sup>718</sup> indirect costs – such as lock-in periods, volume commitments, discount structures and expectations about quality of coverage – played an important role in the decision to switch operator, with the result that the “*existence of switching costs at the wholesale level must be expected to limit the dynamics in the market within the relevant time perspective.*”<sup>719</sup>
530. The Authority considers that two main categories of indirect switching costs are present in this case.
531. First, it was difficult for Telia to expand on the market, given Telenor’s perceived superior network quality and coverage (see Section 9.2.3.1.5 below). For this reason, wholesale customers switching from Telenor to Telia faced a risk of losing retail customers.

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<sup>714</sup> See Reply to the SO, Section 4.3.3.2.

<sup>715</sup> The Authority considers that the evidence on this point is mixed. In its 2010 Market Analysis, at paragraph 311, Nkom noted that: “*In its letter of 27 April 2009 NetCom [i.e. Telia] similarly informed [Nkom] that they have not to date had capacity problems with regard to providing access and nor in the future would capacity problems be an obstacle to providing access.*” However, in its letter of 30 August 2016 addressed to the Authority (Document No 816102, Section 2.1, page 2), Telia stated: “*Telia’s experience from Tele2 and Network Norway’s migration (in 2007 and 2014/2015 respectively) showed that if a MNO/MVNO with a significant customer base would migrate its customers from Telenor’s network to Telia’s network, Telia would indeed have to make investments in additional capacity (in addition to the expected traffic-demand from Telia’s own subscriber base), to allow a “new” customer base onto its network. Accordingly, in Telia’s opinion, if a wholesale customer on Telenor’s network (i.e. Network Norway, TDC and Ventelo) would have wanted to switch to Telia for the purpose of offering MBB (as a stand-alone service), the actual capacity at the given time would have had to be assessed before the actual migration took place; and taking on a significant additional customer base would, in light of the abovementioned experience regarding migration, most likely require investment in additional capacity.*”

<sup>716</sup> See Section 4.3.5.2 of the Reply to the SO for Telenor’s description of Telia’s investment in its network.

<sup>717</sup> See paragraph 233 of Nkom’s 2010 Market Analysis: “*At the wholesale level there does not seem to be particularly high costs associated with switching host operators per se. Providers with a national roaming agreement, and in most cases also MVNOs, will have their own operator codes and their customers will thus not need to switch SIM cards. By switching host operators, and thus possible change of coverage, some costs of a more administrative nature will still have to be expected. For example, such costs can be connected to making end users aware of the change.*”

<sup>718</sup> As indicated in paragraph 539 below, SPs faced additional switching costs.

<sup>719</sup> See paragraph 238 of Nkom’s 2010 Market Analysis and, more in general, Section 4.2.5. See also Section 4.3.4.2 of Nkom’s 2016 Market Analysis.

532. In its 2010 Market Analysis (paragraph 236), Nkom found that “[t]he end users’ perception of coverage differences is another factor than can increase switching costs”. Telenor was well aware of this perceived superior network coverage.<sup>720</sup>
533. Still in 2016, Nkom observed the following regarding the end users’ perception that Telenor’s network was superior:<sup>721</sup> “[...] a change in coverage on switching host operator is a factor that might have major consequences for access buyers and could make switching less attractive [...] Several providers expressed how Telenor’s network is seen by many customers as the best network in terms of quality and coverage. Nkom does not have sufficient evidence for any change in this perception within the analysis’ time horizon. This entails that access buyers at Telenor must probably expect to lose customers if they change host network, or must compensate for retaining them by other means. Nkom thus believes that the customers’ perception of coverage and preferences for Telenor coverage are a factor which contributes to Telenor maintaining its position in the relevant market.”<sup>722</sup> It continued: “switching costs in relation to changes in coverage are a factor which indicates that Telenor can maintain its strong position in the wholesale market and can thus indicate significant market power for Telenor.”<sup>723</sup>
534. To provide a specific example, Tele2 lost about 40 000 customers (i.e. about 10% of its customer base) when it switched from Telenor to Telia in 2008.<sup>724</sup> According to Tele2, the main reason was the “*difference in coverage between Telenor and Telia*”.
535. Second, switching costs also resulted from the terms and conditions of the wholesale access agreements concluded during the Period under Consideration, i.e. long-term agreements, exclusivity clauses with penalties and minimum purchasing obligations. In its 2010 Market Analysis, Nkom noted the following: “*Agreement terms representing obligations in the form of long-term agreements and purchasing obligations are key in this context and could make the threshold for changing very high and in some cases virtually insurmountable.*”<sup>725</sup>
536. For example, during the entire Period under Consideration, Telenor’s largest wholesale client, NwN, could not purchase wholesale access from Telia unless it moved its entire

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<sup>720</sup> This can be seen from an internal memorandum by the Division Director in Telenor’s Wholesale and Regulatory Division, describing short-term and long-term strategies vis-à-vis Tele2 and NwN, dated 25 November 2011: “*Indirect effect from network coverage / Another effect that Telenor need to consider is the value of T2 not being on Telenor’s network. Telenor’s network is generally considered superior to NC’s [NC = NetCom = Telia]. For this reason (among others) T2 will only choose NC if the price is lower than that of Telenor*” (see Document No 657111, page 132 (GMA 21, page 3/5), penultimate paragraph).

<sup>721</sup> In the Authority’s view, if end users still had this perception in 2016, this must also have been the case in the preceding period.

<sup>722</sup> Nkom’s 2016 Market Analysis, paragraph 601.

<sup>723</sup> Nkom’s 2016 Market Analysis, paragraph 602.

<sup>724</sup> See, for example, Document No 788751, Reply by Tele2 and NwN of 9 May 2014 to the Authority’s request for information dated 28 March 2014, response to Question 6.1. As set out in paragraph 514 above, Tele2 signed an MVNO agreement with Telia on 11 May 2007, but it only started on 31 March 2008.

<sup>725</sup> See paragraph 234 of Nkom’s 2010 Market Analysis. See also footnote 522 above.

wholesale traffic, due to a specific clause in its contract with Telenor.<sup>726</sup> A similar restriction applied to Ventelo from November 2010 onwards.<sup>727</sup>

537. In its 2010 Market Analysis, Nkom considered that lock-in clauses and volume commitments in the agreements concluded by Tele2 (with Telia) and NwN (with Telenor) made it very unlikely that either operator would switch host MNO within the period of its analysis (one-and-a-half to two years).<sup>728</sup>
538. The significance of these switching costs can be seen through an episode after Tele2 acquired NwN on 21 October 2011. In brief,<sup>729</sup> when Tele2 invited Telenor and Telia to submit bids for the combined volume of Tele2 and NwN's national roaming requirements,<sup>730</sup> Telia did not express an interest (simply referring to its ongoing agreement with Tele2 which ran until 2014).<sup>731</sup> Telenor responded by requiring and obtaining exclusive negotiations for a period of eight weeks,<sup>732</sup> which ultimately did not result in an agreement. It appears that one obstacle was the significant exit cost that Tele2 would have incurred if it decided to terminate its agreement with Telia.<sup>733</sup>
539. The Authority notes further that SPs faced additional switching costs. In the case of SPs, a switch to another wholesale supplier involved the need to issue new SIM cards or

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<sup>726</sup> See Document No 657260 – EES 27, National Roaming Agreement between Telenor and NwN of 3 April 2008, Clause 1.3(e): “*Network Norway shall not have an agreement for national roaming for GSM or UMTS access with nationwide coverage through another network operator in Norway.*” In an internal memorandum of 25 March 2010 (see Document No 657407 – CJO 85, memorandum from the Division Director of Telenor's Wholesale and Regulatory Division, page 2/2), Telenor stated that NwN's contractual obligation and the penalties it would incur in case of breach made it unlikely that it would be able to enter into a roaming agreement with another operator (“*NwN har også en forpliktelse som de vanskelig kommer ut av og som medfører et så stort potensielt erstatningsbeløp om de bryter med, at de neppe vil eller kan inngå en annen NR-avtale*”; translation by the Authority: “*NwN also has an obligation that is difficult to get out of and that entails such a high potential amount of compensation if they breach it, that they are unlikely to be willing or able to enter into another NR agreement.*”).

<sup>727</sup> In its Reply to the SO (paragraph 479), Telenor confirms that, as from 30 November 2010, Ventelo was precluded from having such an additional wholesale agreement with Telia.

<sup>728</sup> See Document No 782881, Nkom's 2010 Market Analysis (confidential version), paragraphs 326 and 364.

<sup>729</sup> See also paragraph 583 below on this point.

<sup>730</sup> Document No 657111 – GMA 20, letter from Tele2 to Telenor and Telia dated 30 May 2012, pages 2/6 and 3/6.

<sup>731</sup> Document No 788755, presentation by Tele2 to the Authority on 7 August 2013, page 43.

<sup>732</sup> Document No 788755, presentation by Tele2 to the Authority on 7 August 2013, page 43; see also Document No 658362 – EES 100, internal Telenor presentation of 2011, page 1.

<sup>733</sup> See Document No 657111 – GMA 21, internal memorandum by the Division Director of Telenor's Wholesale and Regulatory Division, describing short-term and long-term strategies vis-à-vis Tele2 and Network Norway, dated 25 November 2011, page 4/5: “*This summer [i.e. the summer of 2011] Telenor negotiated with T2, and was close to agreeing on an NRA. One obstacle was however that T2 had an exit cost in the agreement with NC [= NetCom = Telia], estimated to [CONFIDENTIAL].*”

devices with embedded SIMs, which, in addition to their cost, could result in customer losses.<sup>734</sup>

540. Finally, at a more general level, as explained in paragraph 522 above, the Authority recalls that, given its nature as a vertically-integrated operator, Telia had limited incentives to expand its capacity on the wholesale market, as doing so might reduce the profitability of its more commercially important downstream business.

541. On the basis of the considerations set out in paragraphs 512–540 above, the Authority concludes that competition between Telenor and Telia on the relevant wholesale market during the Period under Consideration was limited.

#### 9.2.2.4 *Conclusion on competition among existing MNOs*

542. The Authority concludes that neither Mobile Norway (together with its parents Tele2 and NwN) nor ICE were able to exert a significant competitive constraint on Telenor in the relevant wholesale market during the Period under Consideration. They were only marginal competitors in the relevant wholesale market.

543. Telia was, apart from Telenor, the only MNO in Norway with a nationwide coverage and capable of offering wholesale access for the supply of all relevant mobile communication services, i.e. voice, messaging and mobile data services during the Period under Consideration. However, in light of the considerations set out in Section 9.2.2.3 above, the Authority concludes that Telia did not exert a significant competitive constraint on Telenor.

544. In conclusion, none of the MNOs was able to constrain Telenor’s dominant position (as clearly indicated on the basis of the market shares discussed in the previous section) on the relevant wholesale market in Norway during the Period under Consideration.

### 9.2.3 *Barriers to entry and expansion and potential competition*

#### 9.2.3.1 *Barriers to entry and expansion*

##### 9.2.3.1.1 *Introduction*

545. Barriers to entry are factors that make entry harder or unprofitable while permitting established undertakings to charge prices above the competitive level. Barriers to entry

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<sup>734</sup> See Nkom’s 2006 Market Analysis, paragraph 272: “Switching from a network operator entails some practical consequences for service providers, including issuing new SIM cards to all their customers. This is both time- and cost-intensive and can therefore mean that the service provider, despite the fact that their exit restrictions are reduced, still considers it most appropriate to stay with the original network operator”. See also Nkom’s 2014 Draft Market Analysis, paragraph 283: “[...] for service providers, a change of host operator will make it necessary to change end customers SIM cards. This can be a relatively extensive process that is often expected to lead to a certain loss of customers.”; the Authority’s translation of: “For tjenesteleverandører vil imidlertid et bytte av vertoperator gjøre det nødvendig å bytte SIM-kort hos sluttkundene. Dette kan være en forholdsvis omfattende prosess som ofte må forventes å føre til et visst tap av kunder.”

generally comprise any disadvantage that a new entrant faces when entering a market that the incumbent (dominant firm) does not face.<sup>735</sup>

546. Barriers to growth and expansion are obstacles that a new entrant or smaller existing competitor faces in its ability to grow or expand in a particular market and which limit its ability to pose a viable competitive threat over the medium to longer term.<sup>736</sup>
547. Barriers to entry and expansion are closely related, as many of the factors that make entry harder also make it harder for new entrants to grow or expand.<sup>737</sup>
548. In a market with considerable barriers to entry and/or expansion, established operators will be largely protected from potential competition. Consequently, the disciplinary effect that the threat of competition could otherwise have, will be reduced or may even disappear. Persistently high market shares may in themselves be indicative of the existence of barriers to entry and expansion.<sup>738</sup>
549. The Authority's recommendations on relevant markets refer to structural entry barriers and legal or regulatory entry barriers as follows: "*Structural barriers to entry result from original cost or demand conditions that create asymmetric conditions between incumbents and new entrants impeding or preventing market entry of the latter. For instance, high structural barriers may be found to exist when the market is characterised by absolute cost advantages, substantial economies of scale and/or scope, capacity constraints and high sunk costs [...] Legal or regulatory barriers are not based on economic conditions, but result from legislative, administrative or other state measures that have a direct effect on the conditions of entry and/or the positioning of operators on the relevant market. An example of a legal or regulatory barrier preventing entry into a*

<sup>735</sup> Judgment of 14 February 1978, *United Brands*, 27/76, EU:C:1978:22, paragraph 122; judgment of 13 February 1979, *Hoffmann-La Roche*, 85/76, EU:C:1979:36, paragraph 48, and judgment of 6 October 1994, *Tetra Pak*, T-83/91, EU:T:1994:246 paragraph 110. See also Commission Decision of 13 May 2009 in Case COMP/37.990, *Intel*, paragraphs 866 and 881, upheld on appeal in judgment of 12 June 2014, *Intel*, T-286/09, EU:T:2014:547, the General Court's decision was set aside by the CJEU on other grounds, see judgment of 6 September 2017, *Intel*, C-413/14 P, EU:C:2017:632; and *Telefónica* Decision, paragraphs 224-226, upheld in judgment of 29 March 2012, *Telefónica*, T-336/07, EU:T:2012:172 paragraph 154, affirmed in judgment of 10 July 2014, *Telefónica*, Case C-295/12 P, EU:C:2014:2062.

<sup>736</sup> Judgment of 14 February 1978, *United Brands*, 27/76, EU:C:1978:22, paragraph 122, and see also *Telefónica* Decision, paragraphs 228-229, upheld in judgment of 29 March 2012, *Telefónica*, T-336/07, EU:T:2012:172 paragraphs 154 and 158, affirmed in judgment of 10 July 2014, *Telefónica*, Case C-295/12 P, EU:C:2014:2062; see also the *Google Shopping* Decision, paragraphs 269-270.

<sup>737</sup> Judgment of 14 February 1978, *United Brands*, 27/76, EU:C:1978:22, paragraphs 91 and 122, and Judgment of 6 October 2015, *Post Danmark II*, C-23/14, EU:C:2015:651, paragraph 39. See also the *Google Shopping* Decision, paragraphs 269-270; and Commission Decision of 24 March 2004 in Case COMP/C-3/37.792 *Microsoft*, paragraph 525, confirmed on appeal in judgment of 17 September 2007, *Microsoft*, T-201/04, EU:T:2007:289, paragraph 558.

<sup>738</sup> European Commission's Article 102 Guidance Paper, paragraph 17.

*market is a limit on the number of undertakings that have access to spectrum for the provision of underlying services.”<sup>739</sup>*

550. As demonstrated in the following paragraphs, there were several and significant barriers to entry and expansion in the wholesale market for access and origination services on public mobile telephone networks in Norway during the Period under Consideration.

#### 9.2.3.1.2 Control of infrastructure

551. If an operator controls infrastructure that is not easily duplicated and which represents an important input factor in the relevant market, this could represent a structural entry barrier for potential competitors.

552. In the relevant wholesale market for access and origination services on public mobile telephone networks in Norway, it is necessary either to own, or have effective access to, a mobile communications network in order to offer adequate, nationwide wholesale access and origination services.

553. During the Period under Consideration, the two largest players in the relevant market, Telenor and Telia, were the only owners of nationwide<sup>740</sup> mobile communications networks which could offer access to all services (i.e. voice, messaging and mobile data services).<sup>741</sup> As shown below, this infrastructure represented an important input factor and was not easily duplicated.

554. In its 2010 Market Analysis, Nkom estimated the cost incurred for an operator taking the step from an MVNO to an NRO, with its own radio network covering 75% of the population by 2011, at NOK 1.89 billion.<sup>742</sup> The Authority agrees with Nkom that an investment cost of this size represents a considerable entry barrier. As set out in footnote 94 above, both Nkom and the Norwegian Ministry of Transport and Communications considered that, even with 75% network coverage, it is not possible to compete effectively with Telenor and Telia on the relevant wholesale market.

555. In order to become fully independent of Telenor or Telia, an NRO or MVNO would have to achieve a similar level of network coverage, that is, 100% of the population. However, between 2004 (when Mobile Norway’s predecessor AMI was established) and the end of 2013, Mobile Norway only managed to achieve a network coverage of 75% of the population.<sup>743</sup>

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<sup>739</sup> See the Authority’s 2008 Recommendation on relevant markets, recitals 10 and 11, and the Authority’s 2016 Recommendation on relevant markets, recitals 17 and 18; see also the Authority’s 2004 Recommendation on relevant markets, recitals 14 and 15.

<sup>740</sup> As set out in paragraphs 75 and 71 above, Mobile Norway’s network had limited coverage during the Period under Consideration and ICE’s network also did not have nationwide coverage.

<sup>741</sup> To recall, due to the specific technology it was using, ICE was only able to offer MBB services during the Period under Consideration (see paragraph 72 above).

<sup>742</sup> Nkom’s 2010 Market Analysis, paragraph 118.

<sup>743</sup> Nkom’s 2016 Market Analysis, paragraph 178.

556. Considering the time and sunk costs necessary to create infrastructure capable of competing with Telenor and Telia, the Authority considers control of infrastructure to be a significant structural barrier to entry in the relevant wholesale market during the Period under Consideration.<sup>744</sup>

#### 9.2.3.1.3 *Economies of scale*

557. Economies of scale mean that the average costs per unit decrease when the number of manufactured units increases within a given production range. This is the case for mobile communications services, where fixed costs are high due to high investments in infrastructure, while variable costs are relatively low. The operation of mobile communications networks is therefore characterised by significant economies of scale.<sup>745</sup> Established players (such as Telenor and Telia) benefit from low unit costs as a consequence of these economies of scale due to their large customer base, which makes it more difficult for smaller players (such as Mobile Norway and ICE) to increase their presence in the market and for new players to establish themselves.<sup>746</sup> Economies of scale therefore constituted a barrier to extension and to entry in the relevant wholesale market during the Period under Consideration.

#### 9.2.3.1.4 *Access to frequencies*

558. Access to frequencies is also necessary in order to operate a mobile communications network. Frequencies are auctioned at regular intervals and give the buyer the right to use the frequencies purchased for a limited period.<sup>747</sup> The buyer has no guarantee that it

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<sup>744</sup> In the electronic communications sector, network roll-out is commonly considered an economic barrier to entry. For example, in its Guidelines on market analysis and the assessment of significant market power under the EU regulatory framework for electronic communications networks and services (OJ C 159, 7.5. 2018, p. 1), the Commission states that “markets for the provision of electronic communications services have high barriers to entry, in particular of economic nature, as network roll-out, in the absence of wholesale access agreement, is costly and time-consuming; but also barriers of a legal nature, as in particular spectrum policy can limit the number of mobile network operators”; see paragraph 91.

<sup>745</sup> See for example Commission Decision of 1 September 2016 in Case M.7758 – *Hutchison 3G Italy/Wind/JV*, paragraph 977: “Third, this effect is further exacerbated by the importance of economies of scale in mobile markets, which fuel firms’ incentives to increase their market share to operate more profitably. In practice, such scale is attained through competitive price discounting. Since variable costs are relatively low in mobile telecommunications, such price cuts permit firms to expand their customer base while still earning an appreciable gross margin on each customer that contributes to cover fixed costs. [...]”

<sup>746</sup> In its 2010 Market Analysis, paragraphs 471 and 475, Nkom confirmed that economies of scale exist in mobile networks and this represents a major barrier to entry. It added that an operator needs to have a 20%–30% market share to benefit from economies of scale, and that only Telenor and Telia could therefore benefit from such economies.

<sup>747</sup> For example, the 2001 spectrum auctions for mobile communications in the 900 MHz and 1800 MHz bands in Norway had a duration of 12 years until December 2013. As set out in paragraph 68 above, in December 2013, Nkom conducted a spectrum auction in the 800/900/1800 MHz bands for the following 20 years.

will be able to secure the necessary frequencies for the next period.<sup>748</sup> Thus, access to frequencies is a significant legal/regulatory barrier to entry at the wholesale level.

### 9.2.3.1.5 Coverage

559. As set out in paragraphs 531–534, Telenor’s network was, during the Period under Consideration, and even still in 2016, perceived by wholesale customers (and end users) as superior to Telia’s network.<sup>749</sup> Telenor itself has put emphasis on its network superiority and on achieving ‘best in test’ status: “*Telenor is the undisputed leader in the Norwegian mobile market with the highest subscription market share (49.5%) and the best profitability (-45% EBITDA margin, Telia: -35%). This position is to a large extent based on, over time, having superior network quality.*”<sup>750</sup>

560. This difference in perceived network quality reinforces customer loyalty, increases the switching costs of wholesale customers and contributes to Telenor’s dominance.<sup>751</sup> In

<sup>748</sup> For example, in the spectrum auction held in Norway in December 2013, Tele2 won no spectrum licences and, as of 1 October 2014, could no longer use spectrum licences in the 900 MHz band. ICE was authorised to use these spectrum licences from 1 October 2014; see paragraphs 68 and 76 above.

<sup>749</sup> See Nkom’s 2016 Market Analysis, paragraph 568: “*Up until today, the perception in the market has been that Telenor had the best rolled-out network. On the acquisition of Tele2, Telia also expressed that there was ‘significant asymmetry between Telenor and TSN [TeliaSonera = Telia]’: ‘Today there is significant asymmetry between Telenor and TSN when it comes to coverage, capacity and speed - the ‘quality’ in the networks. This is probably part of the explanation for why Telenor appears to have the most loyal customers - the most quality-conscious customers are loyal to Telenor.’*” See also paragraphs 583–584 of Nkom’s 2016 Market Analysis: “*Telenor’s retail activities and their wholesale customers have access to a network that as of today is seen by many customers and other providers as the best network, especially with regard to coverage. [...] Telenor puts large resources in keeping its position in terms of coverage and quality, this is also confirmed by public statements from the company. Both factors implies that it will be challenging for Telia to change the end users perception of Telenor having the best network*”; “*Nkom believes that coverage is a competitive parameter which is expected to give Telenor’s retail activities, as well as the company’s wholesale activities, an advantage in relation to other vertically integrated operators.*” See also the Norwegian NCA’s Merger Decision V2015-1, paragraph 493 and footnote 281. In paragraph 243 of its Reply to the SO, Telenor stated that the Authority’s reference to the perceived superior network quality of Telenor as a barrier to entry or expansion is surprising, considering Telia’s first move regarding investment in LTE. However, what the Authority (and Nkom) is referring to is the *perception* by end users which was still present even in 2016. Perception does not necessarily correspond to reality.

<sup>750</sup> See Document No 657224 – GST 68, *Strategy Plan for 2013-2015*, page 12/36, Section 5.2; and Document No 679798, *Strategy Plan for 2009-2011*, page 5, Section 2.2.1, where Telenor lists its network as its main competitive strength.

<sup>751</sup> See, for example, paragraphs 601–602 of Nkom’s 2016 Market Analysis; see paragraph 533 above. See also Nkom’s 2010 Market Analysis, paragraph 500: “*Coverage can be a competition parameter. In Norway, Telenor in particular has played up its good coverage in its marketing. The company used to advertise that it had the “best coverage”.* However, the Consumer Ombudsman prohibited the use of the term ‘best coverage’, partly because it could not be documented that Telenor had the best coverage in all cases. Telenor therefore changed its marketing. However, it seems clear that Telenor’s marketing uses coverage as a competitive advantage. [...] Coverage can therefore be a parameter that makes Telenor better able to act independently in the wholesale market”; paragraph 510: “[...] the fact that Telenor’s mobile network has extremely good coverage in Norway helps to maintain the company’s market power in the relevant [wholesale] market”; and paragraph 556: “*The fact that Telenor has a mobile network with excellent coverage in Norway nevertheless helps to maintain the company’s market power in the relevant market.*”

particular, end users' perception of coverage differences is a factor that can increase switching costs.<sup>752</sup> It appears that this is particularly important for providers with a large share of business customers, for whom Telenor was a "must carry".<sup>753</sup> It is worth noting in that regard that Telenor's marketing activities used coverage as a source of competitive advantage.<sup>754</sup> Indeed, Telenor took formal action against its wholesale customer, NwN, to prevent it from advertising that its coverage was as good as Telenor's.<sup>755</sup> This perception of superior network quality has provided Telenor with a competitive advantage, contributing to its dominant position in the wholesale market and enabling it to maintain its high market shares.<sup>756</sup>

#### 9.2.3.1.6 *Other factors*

561. Additional switching costs/barriers result from other factors, including, in particular, the terms and conditions of wholesale access agreements concluded during the Period under Consideration, i.e. long-term agreements, exclusivity clauses with penalties, and minimum purchasing obligations. These are described above (see paragraphs 535–538).

#### 9.2.3.1.7 *Telenor's arguments*

562. In its Reply to the SO, Telenor does not dispute the Authority's assessment of barriers to entry. It does, however, submit that, in essence, barriers to expansion were low or non-existent, since other MNOs had the ability and incentives to expand their capacity to supply mobile access and origination services.<sup>757</sup> As explained in Sections 9.2.2.2 (paragraph 510) and 9.2.2.3 (paragraphs 528–540) above, the Authority disagrees with Telenor on this issue. The Authority recalls that the relevant wholesale market in this case was characterised by significant barriers to expansion during the Period under Consideration, specifically in the form of switching costs resulting from the terms and conditions of the wholesale agreements concluded during the Period under Consideration, i.e. long-term agreements, exclusivity clauses with penalties, and

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<sup>752</sup> See, in this respect, Nkom's 2010 Market Analysis, paragraph 236.

<sup>753</sup> Telenor has considered its coverage to be one of its main competitive advantages. See, for example, Document No 658759 – RWI 23, internal Telenor e-mail exchange, 2–11 November 2012, pages 1/5–2/5, where Telenor internally assesses how far Telia would be willing to compensate Tele2 for switching to an 'inferior' network. It is also evident that coverage is particularly important to providers offering services mainly to business customers. See, for example, Nkom's 2010 Market Analysis, paragraph 236 as well as its draft 2014 Market Analysis, paragraph 284, and the Norwegian NCA's Merger Decision V2015-1, paragraph 493. See also Document No 786244, Hello's reply of 5 May 2014 to the Authority's request for information dated 28 March 2014, non-confidential version, reply to question 6.1 on page 4: "*Telenor is a dominant player in the Norwegian market, and seems to be perceived as the preferred choice by a majority of mobile end-users in the Norwegian market, both with regards to quality, coverage and other factors. This means that for a small reseller like Hello, it is virtually impossible to operate without Telenor.*"

<sup>754</sup> See Nkom's draft 2014 Market Analysis, Section 4.3.6.4 on the importance Telenor has placed on being perceived as the provider with best coverage.

<sup>755</sup> See Nkom's draft 2014 Market Analysis, Section 4.3.6.4.

<sup>756</sup> See footnote 751 above.

<sup>757</sup> See Reply to the SO, Section 4.3.3.

minimum purchasing obligations.<sup>758</sup> In addition, as set out in paragraphs 531–534 and Section 9.2.3.1.5 above, the perceived better quality and coverage of Telenor’s network further amounted to a significant barrier to expansion.

#### 9.2.3.1.8 Conclusion

563. On the basis of the considerations expressed in Sections 9.2.3.1.1–9.2.3.1.7 above, the Authority concludes that, during the Period under Consideration, there were significant barriers to entry and expansion on the relevant wholesale market, which contributed to shielding Telenor from effective competition.

564. This conclusion is in line with the findings of the Norwegian NCA<sup>759</sup> and Nkom.<sup>760</sup>

#### 9.2.3.2 Potential competition

565. Absence of potential competition is also a relevant factor for assessing dominance.<sup>761</sup> For the reasons set out below, the Authority also concludes that there was a lack of potential competition on the relevant wholesale market during the Period under Consideration, which is consistent with the existence of significant barriers to entry and expansion (see Section 9.2.3.1 above).

566. There was only one attempt at entry at the network level during the Period under Consideration. This was the one made by Hi3G Access Norway AS,<sup>762</sup> which acquired a licence to build its own UMTS mobile network in September 2003. However, in 2011, after having spent around NOK 140 million on licence fees, the company returned the licence to the Norwegian authorities without having commenced building a network.<sup>763</sup>

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<sup>758</sup> See paragraphs 535–538 above.

<sup>759</sup> In its Decision V2018-20, the Norwegian NCA concluded that barriers to entry were very high in this wholesale market during the relevant period of its case (i.e. 2010–2014), which partly overlaps with the Period under Consideration in the present case; see, in particular, Section 10.2.3 of the Norwegian NCA’s Decision V2018-20. Among other elements justifying its conclusion, the Norwegian NCA took into account: the need to control a nationwide mobile network; the significant and largely irreversible costs to build a mobile network; the need to have access to suitable locations to install base stations (e.g. through co-location); access to radio frequencies; and difficulties in achieving a sufficiently large customer base in a mature market. The Norwegian NCA came to the same conclusion when examining the acquisition of Tele2 by Telia; see, in particular, Sections 6.4.1.3 and 6.4.2.1.3 of the Norwegian NCA’s Merger Decision V2015-1.

<sup>760</sup> Nkom has so far always concluded that the relevant wholesale market in this case is characterised by high and non-transitory barriers to entry. See, in particular, Nkom’s 2006 Market Analysis, Sections 4.3 and 5.2.10; Nkom’s 2010 Market Analysis, Sections 4.1 and 5.4; Nkom’s 2016 Market Analysis, Sections 4.2 and 5.10; and Nkom’s 2020 Market Analysis, Sections 4.2 and 5.11.

<sup>761</sup> See judgment of 13 February 1979, *Hoffmann-La Roche*, 85/76, EU:C:1979:36, paragraph 48.

<sup>762</sup> See footnote 72 above.

<sup>763</sup> See Nkom’s 2010 Market Analysis, Section 4.2.11; Nkom’s draft 2014 Market Analysis, paragraph 155 and Nkom’s 2016 Market Analysis, paragraph 218, where Nkom notes the following: “*The company Hi3G’s involvement in Norway illustrates how sunk costs can accrue without any business activities being initiated. In 2003, Hi3G paid around NOK 62 million for a licence in the 900-MHz band. An annual frequency charge also accrued, at around NOK 20 million. In March 2011, the company handed back its licence, despite considerable accrued sunk costs.*”

567. As regards potential competition from other providers, contrary to what Telenor claims<sup>764</sup> and as already noted in Section 9.2.2.2 above, ICE, while active on the wholesale market since 2006, could only offer wholesale access to data services during the Period under Consideration, given the specific technology (CDMA 450) the company was using at the time.<sup>765</sup> ICE was, therefore, not an attractive provider of access and origination services on public mobile telephone networks for access buyers which were interested in offering ordinary mobile communications services in the retail market.<sup>766</sup> Therefore, as explained above, ICE could not be seen as an effective competitor on the wholesale market. For the same reason, it could not be considered an effective potential competitor either. Indeed, in 2010, Nkom noted that “*it is highly unlikely that Ice.net will contribute to any degree to competition at the wholesale level in the market for access and origination on mobile networks within the time horizon of the analysis.*”<sup>767</sup> This remained true as recently as in 2016, when Nkom concluded that there was not sufficiently clear evidence that ICE would be able to discipline the established operators on the supply side (i.e. Telenor and Telia).<sup>768</sup> On this basis, the Authority considers that ICE was not an effective potential competitor during the Period under Consideration.
568. As also noted in Section 9.2.2.2 above, Mobile Norway lacked nationwide coverage during the Period under Consideration and, therefore, the company (and its joint owners NwN and Tele2) could not be seen as an effective competitor on the wholesale market. For the same reason, it could not be considered as an effective potential competitor either.
569. Finally, none of the MVNOs and SPs that bought wholesale access from the established MNOs (Telenor and Telia) managed, during the Period under Consideration, to climb the ladder of investment to become an MNO (e.g. in terms of acquiring frequency resources and building up a mobile network). Moreover, as also noted by Telenor,<sup>769</sup> Nkom observed in its draft SMP decision of 2015 that it has not been common practice for operators without their own network to provide wholesale access. The Norwegian NCA similarly recorded that it was not aware that MVNOs and SPs were providing wholesale access to a large extent.<sup>770</sup> In order to provide access to their own wholesale customers, MVNOs and SPs relied on the terms and conditions of access agreed with their host MNOs. However, as already noted in paragraphs 482–487 and Section 9.2.2.3 above, the established MNOs (Telenor and Telia) did not have incentives to provide access at attractive terms and conditions, since doing so would have meant increased competition at the downstream level and thus ‘cannibalisation’ of the corresponding revenues at that

<sup>764</sup> Reply to the SO, Sections 4.3.3.3 and 4.3.3.4.

<sup>765</sup> See Nkom’s 2010 Market Analysis, paragraph 95: “*Ice.net does not offer voice telephony. The main reason for this is probably that there are no handsets for CDMA technology that are compatible with GSM and UMTS networks, which rules out national and international roaming.*”

<sup>766</sup> Another limiting factor was that, if they spread their total traffic among several providers, wholesale customers were only entitled to lower discounts under the prevailing discount scales. See Nkom’s 2010 Market Analysis, paragraph 545. See also paragraph 507 and footnote 673 above.

<sup>767</sup> Nkom’s 2010 Market Analysis, paragraph 95.

<sup>768</sup> Nkom’s 2016 Market Analysis, Section 4.3.8.

<sup>769</sup> Reply to the SO, paragraph 336.

<sup>770</sup> See the Norwegian NCA’s Decision V2018-20, Section 10.2.4.2.

level.<sup>771</sup> For these reasons, MVNOs and SPs cannot be considered as credible potential competitors on the relevant wholesale market during the Period under Consideration.

570. As a result, the Authority is of the view that potential competition on the relevant wholesale market was very limited during the Period under Consideration.

#### 9.2.3.3 *Conclusion on barriers to entry and expansion and potential competition*

571. In the light of the above considerations, the Authority concludes that, during the Period under Consideration, the wholesale market for access and origination services on public mobile networks was characterised by significant barriers to entry and expansion and a lack of potential competition. This meant that actual or potential competitors did not exert a material competitive constraint on Telenor.

#### 9.2.4 *Countervailing buyer power*

572. Competitive constraints can also be exerted by customers, if they have sufficient bargaining strength and are able to switch their demand to alternative suppliers (or to self-supply). As a result, even an undertaking with a high market share may not be able to act to an appreciable extent independently of customers if these have countervailing buyer power.<sup>772</sup> Such buyer power, however, will not be considered a sufficiently effective constraint if it only ensures that a particular or limited segment of customers is shielded from the market power of the dominant undertaking.<sup>773</sup>

573. In this case, the Authority has considered whether countervailing buyer power could attenuate Telenor's presumed dominant position on the wholesale market and whether access buyers were able to credibly threaten to switch their demand away from Telenor.<sup>774</sup>

574. Telenor argues that Tele2 and NwN, given their size on the merchant market, had significant buyer power. Telenor also submits that it was obliged to provide access under the eCom regulatory obligations imposed on it by Nkom to any customer and that other vertically-integrated MNOs had incentives to do the same. It further claims that the non-

<sup>771</sup> See Nkom's 2016 Market Analysis, paragraph 625; see paragraph 522 above.

<sup>772</sup> See judgment of 7 October 1999, *Irish Sugar*, T-228/97, EU:T:1999:246, paragraphs 97-104. See also judgment of 17 December 2009, *Solvay*, T-57/01, EU:T:2009:519, paragraphs 299-303. The CJEU annulled the decision of the General Court on other grounds, see judgment of 25 October 2011, *Solvay*, Case C-109/10 P, EU:C:2011:686, paragraph 75. See also Commission Decision of 13 May 2019 in Case AT.40134 – *AB InBev beer trade restrictions*, paragraph 66; and Commission Decision of 29 March 2006 in Case COMP/E-1/38.113, *Prokent-Tomra*, paragraphs 88-89.

<sup>773</sup> See judgment of 7 October 1999, *Irish Sugar*, T-228/97, EU:T:1999:246, paragraphs 97-104. See also the Commission's Article 102 Guidance Paper, paragraph 18; the Guidelines on the assessment of horizontal mergers under the Council Regulation on the control of concentrations between undertakings, OJ C 31, 05.02.2004, p. 5, paragraphs 64–67; and Commission Decision of 13 May 2019 in Case AT.40134 – *AB InBev beer trade restrictions*, paragraph 66.

<sup>774</sup> See, for example, the *Telefónica* Decision, paragraph 223.

discrimination prohibition imposed on Telenor ensured that the buyer power enjoyed by large customers was also shared with other, smaller customers.<sup>775</sup>

575. Having considered Telenor's arguments, the Authority has however concluded that wholesale customers did not have sufficient buyer power to be able to constrain Telenor on the wholesale market, for the following reasons.
576. First, as demonstrated above,<sup>776</sup> during the Period under Consideration, Telia was the only real possible alternative to Telenor on the relevant wholesale market. However, as also noted by Nkom<sup>777</sup> and explained in Section 9.2.2.3 above, Telia (as well as Telenor) lacked incentives to compete fiercely on the wholesale market, because strong competition at the upstream level would have been detrimental for their (more commercially important) downstream businesses. This in turn implied that the established MNOs' (i.e. Telenor's and Telia's) wholesale customers had limited buyer power.
577. Second, for the reasons set out below, even the largest wholesale customers, i.e. Tele2 and NwN, did not have sufficient buyer power to be able to constrain Telenor during the Period under Consideration.
578. Even if, as Telenor claims,<sup>778</sup> these two wholesale customers' volumes may be considered as sizeable when compared to the investments that Telia and Telenor were making each year to upgrade their mobile networks, size alone does not mean that one or more customers have buyer power.
579. The Authority considers that, despite Tele2's relatively large traffic volume, the circumstances of its switch of its MVNO agreement from Telenor to Telia in 2007/early 2008 (and the terms agreed) show that Tele2 did not have buyer power. Commenting on this switch, Nkom noted that "*several clauses in the agreement between Tele2 and [Telia], including the length of the agreement and volume commitments, are largely designed to meet the host operator's need for predictability relating to their own services in the wholesale market than to promote the interests of an operator in the process of building mobile networks*".<sup>779</sup> According to Nkom, this meant that "*the clauses in question can thus indicate that Tele2, despite its relatively large traffic volume, cannot exercise buyer power of significance in negotiations with some of the network operators*".<sup>780</sup> Moreover, Nkom noted that, as access buyers were expected to roll out their own mobile network in the near future and were therefore likely to buy lower

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<sup>775</sup> See Section 4.3.5 of the Reply to the SO.

<sup>776</sup> See Section 9.2.2.

<sup>777</sup> See Nkom's 2016 Market Analysis, paragraph 625.

<sup>778</sup> See, in particular, Section 4.3.5.2 of the Reply to the SO.

<sup>779</sup> See paragraph 330 of Nkom's 2010 Market Analysis.

<sup>780</sup> Ibidem.

volumes from established MNOs (i.e. Telenor and Telia), they would have been able to exert even less buyer power going forward.<sup>781</sup>

580. The Authority also notes that, leading up to the switch, Tele2 accepted a six-week period of exclusive negotiations with Telia (see paragraph 514 above). The Authority infers from this that Tele2 was unable to play Telia and Telenor off against one another and get better terms. Moreover, in addition to the long contractual term and minimum purchase requirements, the final agreement signed with Telia prevented Tele2 from offering its subscribers an alternative network for mobile communications services in Norway, which supports the Authority's conclusion that Tele2 did not have buyer power.<sup>782</sup>
581. The Authority considers further that NwN's switch from Telia to Telenor, which took place in early 2008, shows that NwN also did not have buyer power. The Authority recalls that, before NwN eventually signed a NR agreement with Telenor, Telenor initially did not even want to compete with Telia to have NwN as a wholesale customer, and simply refused NwN's access request.<sup>783</sup> Telenor maintained this denial of access after Nkom found that this was in conflict with Telenor's regulatory obligations. As Nkom noted, the agreement between NwN and Telenor was eventually signed because NwN terminated its agreement with Telia and because of Nkom's intervention.<sup>784</sup> Nkom went on to conclude that "*the agreement on national roaming between Network Norway and Telenor supports a view of a limited degree of buyer power and strong asymmetry in the relative strength between the agreement parties*".<sup>785</sup>
582. Nkom further noted in its 2010 Market Analysis that "*there are several factors, including the terms of the agreements, indicating a small degree of buyer power and competition at the wholesale level*".<sup>786</sup> Indeed, an indication of the limited buyer power enjoyed by NwN is the fact that Telenor imposed an exclusivity clause on NwN for the duration of the contract, which prohibited the latter from obtaining national roaming from any other network operator with the same coverage as Telenor (i.e. Telia).<sup>787</sup> In addition, its NR agreement with NwN enabled Telenor to demand to renegotiate access terms and

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<sup>781</sup> Ibidem.

<sup>782</sup> See paragraph 514 above.

<sup>783</sup> See paragraphs 515-516 above.

<sup>784</sup> See paragraph 340 of Nkom's 2010 Market Analysis.

<sup>785</sup> See paragraph 347 of Nkom's 2010 Market Analysis. See also paragraph 544 of Nkom's 2010 Market Analysis: "*In 2008, Network Norway terminated its national roaming agreement with [Telia] and entered into an agreement with Telenor. As described in section 4.2.9.3, Telenor did not want to offer Network Norway a national roaming agreement if the company did not terminate its agreement with [Telia.] [Nkom] believes that Telenor's refusal to provide access indicates that Network Norway could exercise very little in the way of buying power vis-à-vis Telenor. When in this situation the company did not enter into an agreement to renew its contracts with [Telia], this may indicate that the company's buying power was not particularly strong in this area either.*"

<sup>786</sup> See paragraph 401 of Nkom's 2010 Market Analysis.

<sup>787</sup> Document No 657260 – EES 27, National Roaming Agreement between Telenor and Network Norway of 3 April 2008, Clause 1.3 (exclusivity).

conditions if NwN were to host an MVNO customer.<sup>788</sup> An important part of the merchant wholesale market was therefore made riskier and less economically attractive for NwN.<sup>789</sup>

583. Further evidence of the limited buyer power enjoyed by Tele2 and NwN is provided by what happened in 2012, following the acquisition of NwN by Tele2. Tele2 invited bids from both Telenor and Telia for Tele2's and NwN's combined wholesale volumes.<sup>790</sup> However, Telia refused to negotiate, simply referring to its ongoing agreement with Tele2.<sup>791</sup> Telenor did agree to negotiate, but required exclusive negotiations for a period of eight weeks.<sup>792</sup> These negotiations did not lead to any agreement. Tele2 states that the combined wholesale volumes resulting from its acquisition of NwN did not have any impact on the terms offered by Telenor, since those terms included no significant volume discount.<sup>793</sup> This evidence is relevant to show that even the combined volumes of Tele2 and NwN did not lead to buyer power for the merged entity.
584. Telenor submits that Tele2 and NwN had the option to self-supply, i.e. to roll out their own network and to do it faster than they did.<sup>794</sup> According to Telenor, the asymmetric termination rates imposed under the eCom regulatory framework in favour of NwN and Tele2 (which was the case until the end of 2012<sup>795</sup>) gave them incentives to do so, which in turn increased their buyer power as wholesale customers. The Authority disagrees with Telenor. As shown in Sections 4.2.1.2.3 and 9.2.2.2 above, the network of Mobile Norway (the MNO jointly owned by Tele2 and NwN) had limited coverage during the Period under Consideration, which meant that self-supply was not a real possibility. This is evidenced by the fact that NwN and Tele2 continued to purchase significant volumes of wholesale access from Telia and Telenor, respectively, until the end of the Period under Consideration. The Authority further notes that, in its Decision V2018-20, the Norwegian NCA concluded that the new price structure introduced by Telenor in 2010 in its wholesale agreement with NwN made it significantly less profitable for NwN to

<sup>788</sup> Document No 657260 – EES 27, National Roaming Agreement between Telenor and Network Norway of 3 April 2008, Clause 3.2.

<sup>789</sup> See Nkom's 2010 Market Analysis, paragraphs 349 of the confidential version (see Document No 1135688). See also paragraph 504 above.

<sup>790</sup> Document No 657111 – GMA 20, letter from Tele2 to Telenor and Telia dated 30 May 2012, pages 2 and 3.

<sup>791</sup> Document No 788755, presentation by Tele2 to the Authority on 7 August 2013, page 43.

<sup>792</sup> Document No 788755, presentation by Tele2 to the Authority on 7 August 2013, page 43; see also Document No 658362 – EES 100, internal Telenor presentation of 2011, page 1.

<sup>793</sup> See Document No 788755, presentation by Tele2 to the Authority on 7 August 2013, page 43; see also Document No 658873 – CJO 56, internal Telenor memorandum dated 7 November 2012, page 4/9, where it appears that Tele2 sought a 25% price reduction from 2013 and a 35% reduction in 2015, while Telenor was only willing to offer a 5% reduction; and Document No 658759 – RWI 23, internal Telenor e-mail exchange, 2–11 November 2012, regarding negotiations with Tele2. See also the Norwegian NCA's Decision V2018-20, Section 10.2.5.

<sup>794</sup> See paragraph 277 of the Reply to the SO.

<sup>795</sup> See the termination rates table provided in footnote 4 in the Authority's "No comments" letter of 19 December 2015 on the Wholesale market for voice call termination on individual mobile networks in Norway, available at: [https://www.eftasurv.int/cms/sites/default/files/documents/gopro/2140-M7\\_Annex%204\\_ESA%20letter.pdf](https://www.eftasurv.int/cms/sites/default/files/documents/gopro/2140-M7_Annex%204_ESA%20letter.pdf), accessed June 2020.

- develop its own mobile network, with the result that the development of such network was delayed.<sup>796</sup> The Norwegian NCA decided that this amounted to an abuse of a dominant position by Telenor during the period between August 2010 and June 2014.
585. In light of the above considerations, the Authority concludes that neither Tele2 nor NwN had sufficient buyer power to be able to constrain Telenor on the relevant wholesale market during the Period under Consideration. This conclusion is consistent with the conclusion reached by Nkom in 2010.<sup>797</sup>
586. Telenor submits further that MVNOs were also in a position to exercise bargaining power.<sup>798</sup> By way of example, Telenor notes that it had to agree to eight price adjustments with Ventelo in the period 2005–2010.
587. The Authority observes first that, as explained in Section 9.2.6.1 below, price reductions do not necessarily evidence buyer power and effective competition.
588. The Authority notes further that TDC and Ventelo (which had an MVNO agreement in place with Telenor since 2005) purchased considerably lower volumes than Tele2 and NwN. In the Authority's view, it is not plausible that these two MVNO customers had more buyer power than Tele2 and NwN (which, as concluded above, had limited buyer power).<sup>799</sup>
589. In addition, the MVNO agreements signed by TDC and Ventelo with Telenor included provisions whereby Telenor paid lower termination rates for calls terminated on those operators' networks in exchange for more favourable wholesale access prices.<sup>800</sup> This meant that TDC and Ventelo partly relinquished the benefit of asymmetric termination rates in exchange for lower access prices, which undermined the stated purpose of asymmetric termination rates in the first place. In the Authority's view, Telenor would not have been able to achieve such a price clause if its MVNO customers had buyer power of any significance.

<sup>796</sup> See the Norwegian NCA's Decision V2018-20, Section 11.5.3.

<sup>797</sup> See Nkom's 2010 Market Analysis, Section 5.6.2, notably paragraphs 547 and 548: "*In summary, [Nkom] believes that the buyers of access in the market for access and call origination on public mobile telephone networks can only exercise limited buying power vis-à-vis Telenor. Network Norway and Tele2's switching of network provider shows that switching actually happens and can therefore facilitate the exercising of buying power. However, [Nkom] cannot see that this has had any noticeable positive effect on the buying power of buyers of access from Telenor. Additionally, [Nkom] believes that buyers of access have no other bargaining chips that can strengthen their buying power in negotiations. [...]*"; "*In view of this, [Nkom] believes that there is not sufficient countervailing buying power for regarding Telenor as not having significant market power in the market for access and call origination on public mobile telephone networks after all.*"

<sup>798</sup> See Reply to the SO, paragraph 278.

<sup>799</sup> Nkom made the same finding in its 2010 Market Analysis, notably paragraph 539: "*Since other buyers in the relevant market (including service providers) have considerably less volume than Tele2 and Network Norway, they must be assumed to have fewer opportunities to exercise buying power.*"

<sup>800</sup> See, Document No 657260 – EES 39, page 25: MVNO Roaming Agreement between Telenor and Ventelo, dated 20 October 2005, Annex 5 – prices; and Document No 657260 – EES 53, page 26: MVNO Roaming Agreement between Telenor and TDC, dated 29 June 2005, Annex 5 – prices.

590. The Authority notes that Nkom similarly came to the conclusion in 2010 and in 2016 that TDC and Ventelo enjoyed only a low degree of buyer power.<sup>801</sup>
591. Moreover, if they wanted to compete on the retail market, Ventelo (which provided services mainly to business customers) and TDC (which provided services to business customers only), could not effectively use Telia as an alternative to play off against Telenor, given Telenor's (at least perceived) superior network quality and coverage.<sup>802</sup> This was an important factor for business customers.
592. Finally, the fact that Telenor was subject to a non-discrimination obligation meant that any price reduction agreed with its smaller wholesale customers also had to be applied to larger customers. This meant that Telenor would have lacked incentives to agree to a price reduction with its smaller wholesale customers, including Ventelo and TDC. For these reasons too, the Authority considers that Telenor's MVNO customers lacked buyer power.
593. In light of these considerations, the Authority concludes that wholesale access buyers did not have sufficient buyer power to be able to constrain Telenor on the relevant wholesale market during the Period under Consideration. The Authority's conclusion is consistent with the one reached by Nkom in its 2010 and 2016 Market Analysis.<sup>803</sup> It is also in line with the conclusion reached by the Norwegian NCA in relation to buyers on the same wholesale market in its decision finding that Telenor had abused its dominant position in the period 2010-2014, which partly overlaps with the Period under Consideration.<sup>804</sup>

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<sup>801</sup> See paragraph 339 of Nkom's 2010 Market Analysis: "*A low degree of buyer power is an indicator of a lack of competition. [Nkom] therefore believes that the access agreements between Telenor and TDC and Ventelo are not an indicator that the market is tending toward competition*". See also Section 5.6.2 of Nkom's 2010 Market Analysis, notably paragraphs 539 and 547-548 (quoted in footnotes 799 and 797 above). In its 2016 Market Analysis (paragraph 618), Nkom wrote: "*As of today, Phonero [which acquired Ventelo with effect from 1 January 2015] is the largest buyer of access from Telenor, with a market share of around 3 per cent, based on number of mobile telephony subscriptions. TDC has a market share of just below 1 per cent. Up until today, Nkom has not seen any signs that these providers have been able to exert buyer power vis-à-vis Telenor to a sufficient degree to be able to discipline the company's wholesale offers*". See also paragraph 626 of Nkom's 2016 Market Analysis: "*Assessment of buyer power shows that access buyers have limited opportunities to exert buyer power in the relevant wholesale market. Nkom has no evidence that the MVNOs TDC and Phonero (Ventelo) have been able to exert buyer power towards Telenor during the relevant regulation period. The same applies to buyers of service provider access. Nor does Nkom expect that within the analysis' time horizon these operators will increase their customer base to such an extent that this entails significantly increased negotiating power*".

<sup>802</sup> See paragraphs 531-534 above.

<sup>803</sup> See Nkom's 2010 Market Analysis, Section 5.6.2 and Nkom's 2016 Market Analysis, Section 5.11. In 2006, Nkom's view was more nuanced; see paragraph 341 of Nkom's 2006 Market Analysis: "*It is [Nkom's] assessment that operators on the demand-side may have a certain amount of bargaining power with respect to access to the existing networks. In [Nkom's] view, this fact will not, however, apply in all cases or to a very significant degree*".

<sup>804</sup> See the Norwegian NCA's Decision V2018-20, Section 10.2.5. This was confirmed by the Norwegian Competition Tribunal, albeit for a slightly shorter period, i.e. from 18 August 2010 to 6 December 2013 (see the Competition Tribunal's Decision V03/2019, paragraph 580).

### 9.2.5 The impact of the eCom regulatory framework on the assessment of dominance

594. Telenor submits that the Norwegian ecom rules and Nkom's SMP Decisions (together "the eCom regulatory framework") which were applicable in Norway during the Period under Consideration restricted its ability to behave independently of customers and competitors (i.e. prevented it from being dominant).<sup>805</sup> The Authority disagrees.
595. First, the Authority observes that Telenor was subject to various regulatory obligations *precisely* because Nkom found Telenor to have SMP on Market 15 during the Period under Consideration (and beyond).<sup>806</sup> As noted in paragraph 96 above, SMP is a synonym for dominance within the meaning of Article 54 EEA. In the Authority's view, Telenor is incorrect to claim that it was not dominant because of the regulatory obligations which were imposed as a result of it having been found to be dominant in the first place. A more appropriate question would, in the Authority's view, be whether the applicable eCom regulatory framework has been effective enough, during the Period under Consideration, to prevent Telenor abusing its dominant position. In this case, as shown in Section 10 below, Telenor was able to abuse its dominant position by squeezing its wholesale customers' margins, in spite of the regulatory obligations imposed on it by Nkom.<sup>807</sup>
596. It is also important to recall that Telenor's wholesale tariffs for MVNO and SP access were not subject to *ex ante* price controls at all during the Period under Consideration. In addition, while its NR tariffs were subject to a retail-minus obligation until 2010, mobile data was not included in Telenor's access obligations at that time. Furthermore, this price control for NR access was removed in 2010. This means that no wholesale price controls applied for mobile data services during the entire Period under Consideration, and no wholesale price controls applied for voice/SMS services after 2010.<sup>808</sup>
597. Second, as Telenor acknowledges,<sup>809</sup> the applicability of the eCom regulatory framework does not in any event prevent the parallel application of competition rules.<sup>810</sup> Competition law is thus complementary to the regulatory framework in that, if a dominant undertaking

<sup>805</sup> See Reply to the SO, Section 4.3.4. To recall, during the entire Period under Consideration, Telenor was subject to market regulation and obliged to provide access to all access seekers (except SPs), to refrain from discriminating between wholesale customers and, until 2010, to offer NR access at cost-oriented prices.

<sup>806</sup> See Nkom's 2006 Market Analysis, Section 6.4; Nkom's 2010 Market Analysis, Section 5.7; and Nkom's 2016 Market Analysis, Section 5.12.

<sup>807</sup> See also Sections 9.2.2.3 and 9.2.4 above, where the Authority noted that Nkom found Telenor to be in breach of its regulatory obligations when it refused to provide NR access to NwN (see also footnote 823 below). See also, in this respect, Nkom's 2010 Market Analysis, Section 4.2.9.3.

<sup>808</sup> While accounting separation obligations were, in principle, used (including for data traffic from 2010) to monitor compliance with the non-discrimination obligation for MVNO access (throughout the Period under Consideration) and for NR access (from 2010 onwards), these were based on aggregated accounting information for Telenor's operations at wholesale and retail levels. In addition, as noted in paragraph 119 above, Nkom only introduced comprehensive price control obligations (by way of defined margin squeeze tests for NR, MVNO and SP access) from 2016 onwards.

<sup>809</sup> See Reply to the SO, paragraph 257.

<sup>810</sup> In judgment of 14 October 2010, *Deutsche Telekom, C-280/08 P*, EU:C:2010:603, paragraph 92, the CJEU found "the competition rules laid down by the EC Treaty supplement in that regard, by an *ex post* review, the legislative framework adopted by the Union legislature for *ex ante* regulation of the telecommunications markets."

abuses its position despite the regulatory framework, competition law will apply *ex post*, even though the market has been regulated *ex ante* to protect the competitive process. As a result, while dominant undertakings may be subject to sector-specific regulation, their conduct must still also comply with competition law.

598. In the telecommunications sector, for example, Deutsche Telekom was found to be dominant and to have abused its dominance by implementing a margin squeeze, notwithstanding the fact that price regulation had been imposed on Deutsche Telekom by the German NRA.<sup>811</sup> In *Telefónica*, the GCEU also confirmed that, even if an operator had been required by the NRA to provide a service (access to the local loop, in that specific case) at prices based on costs, that fact was not sufficient to exclude it from having a dominant position.<sup>812</sup> In the *Slovak Telekom* Decision, despite the fact that it was subject to a regulatory obligation to provide unbundled access to its local loop,<sup>813</sup> Slovak Telekom was found to be dominant and to have abused its dominance by refusing to supply and by implementing a margin squeeze. In Norway, in November 2012, Telenor was found to be dominant in the wholesale market for access and call origination on mobile networks by the Asker and Bærum District Court, pursuant to the Norwegian equivalent of Article 54 EEA, which, as the Court noted, is modelled on the latter provision.<sup>814</sup> The Court also held that, notwithstanding regulation by Nkom, Telenor was not subject to constraints that would prevent it from being dominant.<sup>815</sup>

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<sup>811</sup> See Commission Decision of 21 May 2003 in Case COMP/C-1/37.451, 37.578, 37.579 – *Deutsche Telekom AG* (hereafter “*Deutsche Telekom* Decision”), OJ L 263, 14.10.2003, p. 9, paragraph 58; and judgment of 10 April 2008, *Deutsche Telekom*, T-271/03, EU:T:2008:101, upheld on appeal in judgment of 14 October 2010, *Deutsche Telekom*, C-280/08 P, EU:C:2010:603.

<sup>812</sup> See judgment of 29 March 2012, *Telefónica*, T-336/07, EU:T:2012:172, paragraph 166; upheld on appeal in judgment of 10 July 2014, *Telefónica*, C-295/12 P, EU:C:2014:2062. See also judgment of 29 March 2012, *Spain v Commission*, T-398/07, EU:C:2012:173, paragraph 50: “First, the fact that the contested decision related to products and services regulated by CMT [the Spanish NRA] in accordance with the applicable European directives is of no relevance. As correctly stated by the Commission, in the absence of express derogation to that effect, competition law is applicable to regulated sectors (see, to that effect, *Joined Cases 40/73 to 48/73, 50/73, 54/73 to 56/73, 111/73, 113/73 and 114/73 Suiker Unie and Others v Commission* [1975] ECR 1663, paragraphs 65 to 72, and *Case 66/86 Saeed Flugreisen and Silver Line Reisebüro* [1989] ECR 803). Further, the applicability of the competition rules is not ruled out where the sectoral provisions concerned do not preclude undertakings from engaging in autonomous conduct which prevents, restricts or distorts competition (see *Joined Cases C-359/95 P and C-379/95 P Commission and France v Ladbroke Racing* [1997] ECR I-6265, paragraphs 33 and 34 and case-law cited). As the Commission found in recitals 665 to 694 of the contested decision, which are not disputed by the Kingdom of Spain, *Telefónica* had in the present case leeway in which to prevent the margin squeeze (see also paragraph 27 above). The conduct of *Telefónica* penalised in the contested decision is therefore within the scope of Article 82 EC (see also, to that effect, *Opinion of Advocate General Mazák in Case C-280/08 P Deutsche Telekom v Commission* [2010] ECR I-9555, points 15 and 19).”

<sup>813</sup> *Slovak Telekom* Decision, Section 4.4, and in particular paragraphs 45–46. See also judgment of 13 December 2018, *Slovak Telekom*, T-851/14, EU:T:2018:929, paragraph 9.

<sup>814</sup> The November 2012 Asker and Bærum District Court Judgment, pages 30–31.

<sup>815</sup> The November 2012 Asker and Bærum District Court Judgment, page 35. See also the Norwegian NCA’s Decision V2018-20, paragraph 488. This conclusion was confirmed on appeal by the Norwegian Competition Tribunal; see Norwegian Competition Tribunal’s Decision V03/2019, paragraph 172. An appeal against the latter decision is currently pending.

599. In the present case, Telenor's market share on the wholesale market,<sup>816</sup> the lack of material competitive constraint exerted by other MNOs,<sup>817</sup> existing barriers to entry and expansion and the lack of potential competition,<sup>818</sup> as well as the lack of countervailing buyer power,<sup>819</sup> all lead the Authority to conclude that Telenor had a dominant position on the wholesale market during the Period under Consideration. The Authority considers that the fact that Telenor was subject to regulation imposed by Nkom does not invalidate that conclusion. In particular, as also noted by Nkom,<sup>820</sup> the obligations imposed on Telenor by Nkom gave the company a wide scope to negotiate the terms of its access agreements with wholesale customers.
600. In fact, even if the eCom regulatory framework played an important role in the Period under Consideration (for example, in the conclusion of Tele2's MVNO agreement with Telia and of NwN's NR agreement with Telenor),<sup>821</sup> it did not prevent Telenor from abusing its dominant position (as found in Section 10 below)<sup>822</sup> or from breaching its regulatory obligations on more than one occasion.<sup>823</sup> This is evidence, in the Authority's view, that the eCom regulatory framework in place during the Period under Consideration did not have a sufficient disciplining effect on Telenor.
601. Telenor refers<sup>824</sup> to the GCEU's judgment in *General Electric*, according to which the Commission "must [...], in the course of its appraisal, identify the conduct foreseen and, where appropriate, evaluate and take into account the possible deterrent effect represented by the fact that the conduct would be clearly, or highly probably, unlawful under Community law."<sup>825</sup> In the Authority's view, the GCEU was here concerned with evaluating the conduct of the dominant firm on the market, rather than with the question of dominance. The Authority has evaluated Telenor's conduct on the relevant market in Section 10 below, where it shows that the eCom regulatory framework did not prevent Telenor from abusing its dominant position.
602. In addition, Telenor argues that the regulatory obligation imposed on it to grant wholesale access strengthened the competitive dynamics of the wholesale market and made it

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<sup>816</sup> See Section 9.2.1 above.

<sup>817</sup> See Section 9.2.2 above.

<sup>818</sup> See Section 9.2.3 above.

<sup>819</sup> See Section 9.2.4 above.

<sup>820</sup> See, for example, Nkom's 2010 Market Analysis, Section 4.2.9.5.

<sup>821</sup> See, for example, Section 9.2.2.3 above, and the references to Nkom's 2010 Market Analysis therein.

<sup>822</sup> See also the Norwegian NCA's Decision V2018-20.

<sup>823</sup> As noted in Section 9.2.2.3 above, according to Nkom, Telenor infringed its obligation to grant access to NwN in 2007. In another case, the Norwegian Ministry of Transport and Communications found Telenor to have discriminated against TDC, in spite of non-discrimination obligations imposed by Nkom (see the Decision by the Ministry of Transport and Communications of 20 December 2012 (available at: <<http://www.regjeringen.no/en/dep/sd/tema/telekommunikasjon/vedtak-i-klagesaker.html?id=464115>>, accessed June 2020).

<sup>824</sup> See Reply to the SO, paragraph 259.

<sup>825</sup> Judgment of 14 December 2005, *General Electric*, T-210/01, EU:T:2005:456, paragraph 75.

impossible to be dominant.<sup>826</sup> However, as shown in Section 9.2.2 above, the Authority has found that the competitive constraints exerted by other MNOs were limited and insufficient to constrain Telenor, despite the access obligations imposed on Telenor. The Authority has further shown in Section 9.2.4 above that wholesale customers lacked buyer power, despite Telenor's regulatory obligations.

603. Finally, Telenor again refers to the rules on asymmetric termination rates, which, according to Telenor, encouraged the development of Tele2 and NwN's network throughout the Period under Consideration and thus increased competition in the wholesale market.<sup>827</sup> Leaving aside the question of whether asymmetric termination rates were effective in encouraging the development of a third mobile network in Norway,<sup>828</sup> the Authority refers to Section 9.2.2.2 above, where it concluded that Mobile Norway lacked nationwide coverage during the Period under Consideration and did not exert a material competitive constraint on Telenor.
604. In light of the above, the Authority considers that the eCom regulatory framework in place during the Period under Consideration does not alter the Authority's conclusion that Telenor was dominant on the relevant wholesale market during that period.

## **9.2.6 Other arguments raised by Telenor**

### **9.2.6.1 Prices in the wholesale market**

605. Telenor points to the significant reduction in the wholesale prices paid by NwN, applied within the term of each the relevant contracts, which it considers evidence of competition on the wholesale market, and thus incompatible with a finding of dominance.<sup>829</sup>
606. First of all, the price reduction to which Telenor refers only concerns one wholesale customer and only for the period from Q3 2008 – Q4 2010. The Authority further considers that the price reductions that took place at the wholesale level in Norway during the Period under Consideration were not sufficient to conclude that there was effective competition.
607. In fact, as explained in Sections 9.2.2 and 9.2.4 above, the price reductions which took place on the wholesale market are not the result of effective competition and cannot be attributed to buyer power, since wholesale customers – even the largest ones, i.e. NwN and Tele2 – only had a limited amount of it.

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<sup>826</sup> Reply to the SO, paragraph 265.

<sup>827</sup> Reply to the SO, paragraph 268.

<sup>828</sup> The Authority notes that on 21 June 2018, the Norwegian NCA imposed a fine of NOK 788 million on Telenor, finding that Telenor's amendments to its wholesale access agreement with NwN had the objective of limiting further investment in NwN's mobile network and thus represented an abuse of its dominant position. See the Norwegian NCA's Decision V2018-20.

<sup>829</sup> Reply to the SO, Section 4.3.7.6.

608. Rather, as also noted in those sections, sector-specific *ex ante* regulation imposed on Telenor and the threat of regulatory intervention played an important role in the establishment and terms of access agreements, including access prices.
609. This was confirmed by Nkom in 2010: “*In [Nkom’s] opinion there are on this basis indications that the price reductions that have taken place at the wholesale level can be linked to a greater extent to the disciplining effects of regulatory obligations in the relevant market and changed regulation in adjacent markets, rather than competition between the established network owners to attract buyers of access. [Nkom] therefore believes that the price reductions at the wholesale level provide to a small extent a basis for assuming that the market will tend towards competition without regulation.*”<sup>830</sup> It added: “[W]ith regard to price developments at the wholesale level, there are few signs that Telenor is facing competition that disciplines its pricing. Telenor has reduced its charges for all forms of access since the previous decision. However, this appears to be due more to the threat of regulatory intervention than to competition at the network level [...]”.<sup>831</sup> Nkom concluded that: “*In view of this, [Nkom] believes that the assessment of prices and price developments at the wholesale level strengthens the presumption that there is no effective competition in the market for access and call origination on public mobile telephone networks and that Telenor has significant market power.*”<sup>832</sup>
610. Further, as referred to above, while the Authority accepts that regulation may have had some limited disciplinary effects, this was not to a sufficient degree as to constrain Telenor’s ability to act independently during the Period under Consideration.
611. Moreover, as also noted in Section 9.2.2 above, established MNOs (Telenor and Telia) had an incentive to keep their wholesale customers’ traffic on their networks while a third mobile network was being rolled out. The pricing reductions granted by Telenor to NwN (and by Telia to Tele2) to their wholesale customers should thus be seen in this context.<sup>833</sup>
612. Regarding that context, the Authority notes that, according to Nkom, price reductions granted by the established MNOs (Telia and Telenor) to access buyers could be explained

<sup>830</sup> See Nkom’s 2010 Market Analysis, paragraph 272.

<sup>831</sup> Nkom’s 2010 Market Analysis, paragraph 519. See also paragraph 517, where Nkom noted: “*Tele2’s switch of host operator [from Telenor to Telia in 2008] appears to have had little or no disciplining effect on the rates in other access agreements with Telenor. Telenor adjusted its MVNO charges somewhat in February/March 2009. In view of the foregoing assessments, the downward adjustment appears to be largely related to possible margin squeezes on MVNOs if their access charges were not reduced when their termination charges were adjusted downwards.*”

<sup>832</sup> Nkom’s 2010 Market Analysis, paragraph 520.

<sup>833</sup> See Nkom’s 2010 Market Analysis, paragraph 271: “*In [Nkom’s] view both Telenor and [Telia] have incentives to reduce access prices for keeping traffic that could be transferred to Mobile Norway’s network. So long as both providers have excess capacity in the network, the cost of providing access will be close to marginal cost. The results of the LRIC model show that the underlying cost of producing voice, SMS and data on Telenor and [Telia] networks is considerably below current access prices. In isolation, it indicates that the established network owners have significant latitude in that they are able to reduce access prices down to a price level where the services are, on average, covering network owner’s marginal costs and the relevant share of overhead costs. In the limited period during which a third nationwide network is being established, both Telenor and [Telia] thus have the incentive and ability to make strategic reductions in access prices to the greatest extent possible to keep traffic from buyers of access on their networks.*”

by “strategic pricing” considerations, rather than by the existence of effective competition on the wholesale market. In particular, Nkom considered that both Telia and Telenor could offer commercially attractive access terms to their wholesale customers (even though this meant more competition at the retail level in the short term), in order to keep their customers’ traffic on their network and thus prevent such traffic from being moved onto Mobile Norway’s network (which was being rolled out at the time), thereby limiting sustainable infrastructure-based competition on the wholesale market in the long term.<sup>834</sup>

613. This is further illustrated by the Norwegian NCA’s Decision V2018-20, where the NCA found that the revised access terms offered by Telenor to NwN in 2010 hindered the development of the third mobile network in Norway and therefore represented an abuse of a dominant position by Telenor.<sup>835</sup>
614. In light of the above considerations, therefore, the Authority rejects Telenor’s claim that the reduction in wholesale charges experienced by NwN during the Period under Consideration and, in general, the pricing dynamics on the relevant wholesale market, can be seen as evidence of effective competition on such market.

#### 9.2.6.2 *Prices in the downstream market*

615. Telenor argues<sup>836</sup> that three vertically-integrated MNOs (Telenor, Telia and ICE), as well as NROs, MVNOs and SPs competed intensely at the downstream level to provide mobile communications services and stand-alone MBB services to end users. According to Telenor, this is evidence that the wholesale market was also competitive.
616. The Authority recalls, however, that all the factors<sup>837</sup> considered so far consistently indicate that Telenor was dominant on the wholesale market during the Period under Consideration.
617. As far as competition on the relevant downstream market (i.e. stand-alone MBB services to residential customers) is concerned, the Authority refers to Section 9.3 below, where it concludes that Telenor had a high degree of market power on that market as well during the Period under Consideration. Even in a broader retail market for mobile communications services including residential and business customers, Telenor’s market share was equal to or above 50% (both on a subscription and a revenue basis) during the period 2005–2015.<sup>838</sup>
618. In addition, the Authority refers to Section 10 below and paragraph 373 above and Annex 2 to this Decision, where it has shown that the wholesale prices charged by Telenor and Telia to their wholesale customers, in combination with the prevailing retail prices, led

<sup>834</sup> See Nkom’s 2010 Market Analysis, Section 4.2.9.4.

<sup>835</sup> See the Norwegian NCA’s Decision V2018-20, Sections 11.5.3 and 11.6.

<sup>836</sup> Reply to the SO, Section 4.3.7.7.

<sup>837</sup> These include: high market shares, absence of existing competition, barriers to entry and expansion, absence of potential competition and absence of countervailing buyer power.

<sup>838</sup> See Nkom’s 2016 Market Analysis, Section 5.3.2.

to negative gross margins in the relevant retail market in the present case during the entire Period under Consideration or the major part or it. As shown in Section 10.5 below, this negatively impacted these wholesale customers' ability to compete on the relevant retail market.

619. On this basis, the Authority rejects Telenor's claim that the level of competition at the downstream level shows that it was not dominant on the relevant wholesale market during the Period under Consideration.

#### 9.2.6.3 *The report by Copenhagen Economics*

620. Telenor refers<sup>839</sup> to a report of 28 January 2010 that it commissioned from the Copenhagen Economics consultancy firm.<sup>840</sup> This report was originally submitted in response to Nkom's draft SMP Decision of 21 October 2009 relating to Market 15. It challenged Nkom's preliminary conclusions that: (i) the market under consideration (the same as the wholesale market at issue here) would not tend towards effective competition in the relevant timeframe; and (ii) Telenor held SMP on the relevant market.

621. Nkom took Telenor's objections into account in its final 2010 Market Analysis and 2010 SMP Decision but still, as already noted, found Telenor dominant on the relevant wholesale market.

622. The Authority considers that Telenor's objections contained in the Copenhagen Economics report have been addressed earlier in this Section 9.2, with appropriate references to Nkom's findings as necessary.

#### 9.2.6.4 *The Commission's 2004 decision relating to Finland*

623. Telenor further refers<sup>841</sup> to a veto decision adopted by the European Commission in 2004 under Article 7 of the Framework Directive,<sup>842</sup> which required the Finnish NRA to withdraw its draft regulatory measure concerning the wholesale supply of mobile access and call origination services in Finland.<sup>843</sup> In its draft measure, the Finnish NRA had preliminarily concluded that TeliaSonera had SMP in the market under consideration, because of its market share in excess of 60%, among other factors. The Commission, however, found the NRA's analysis to be deficient, due to its failure to take into consideration recent market dynamics (including the rapid growth of SPs in the Finnish retail mobile market), its failure to provide evidence of capacity constraints, high switching costs<sup>844</sup> and the absence of countervailing buyer power; and the undue weight

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<sup>839</sup> Reply to the SO, Section 4.3.8.

<sup>840</sup> See Annex 10 to the Reply to the SO.

<sup>841</sup> Reply to the SO, Section 4.3.9.

<sup>842</sup> See footnote 108 above.

<sup>843</sup> Commission Decision C(2004)3682 of 5 October 2004 pursuant to Article 7(4) of Directive 2002/21/EC, concerning case FI/2004/0082: Access and call origination on public mobile telephone networks in Finland.

<sup>844</sup> With regard to switching costs in the present case, the Authority recalls that in an internal memorandum of 25 March 2010, Telenor stated that, given NwN's contractual obligations and the penalties it would incur in case of breach, it was unlikely that it would be able to enter into a NR agreement with another operator; see Document

given to evidence of network effects, economies of scale and scope and substantial financial advantages.

624. Telenor argues that the Commission's criticisms of the Finnish NRA's market analysis apply equally to the Authority's analysis in this case (as set out in the SO), notably when it comes to the assessment of switching costs for SPs and MVNOs and the possibility for MNOs to reimburse or pay for such costs on switching.<sup>845</sup>
625. At the outset, the Authority recalls that it has made an *ex post*<sup>846</sup> holistic assessment of several factors (including those mentioned by the Commission) and all the factors<sup>847</sup> considered – market shares, the existence of entry and expansion barriers, limited existing competition, the absence of potential competition and buyer power (or lack thereof) – consistently indicate that Telenor was dominant on the relevant wholesale market during the Period under Consideration.
626. Further, the Authority recalls that, in all of its market analyses to date (i.e. 2006, 2010, 2016 and even as recently as in 2020), Nkom has found Telenor to be dominant on the relevant wholesale market,<sup>848</sup> each time as a result of a comprehensive forward-looking assessment. The Authority has, so far, always agreed with Nkom's conclusions.
627. Lastly, the Authority notes that the assessments by each NRA, and the subsequent decisions by the Commission (for EU member states) and the Authority (for EEA EFTA states), are fact-specific and the conclusions cannot simply be extrapolated from one country (or market) to another. There are important differences between this case and the Finnish one. By way of example, in Finland, at the time, there were three nationwide MNOs in the relevant market and, as noted by the Commission, “SPs were usually negotiating with all MNOs and comparing prices and other terms.”<sup>849</sup> In contrast, in this case, as already noted, neither Mobile Norway nor ICE were able to exert a material competitive constraint on Telenor. Further, the only other nationwide MNO (Telia) capable of offering all relevant services (i.e. voice, messaging and mobile data services)

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No 657407 – CJO 85, memorandum of 25 March 2010 from the Division Director of Telenor's Wholesale and Regulatory Division, page 2/2 (see footnote 726 above).

<sup>845</sup> Reply to the SO, paragraphs 320 and 321.

<sup>846</sup> As already noted (see Section 9.1 above), although the underlying principles are the same, there is a difference in purpose between the market analysis conducted by a NRA as set out in the Framework Directive and the one conducted by the Authority in the context of Article 54 EEA. The former is a forward-looking evaluation of the relevant market, based on prevailing market conditions, aimed at establishing whether the market is prospectively competitive and whether any operator may have SMP on the relevant market. On the contrary, the Authority conducts a backward-looking evaluation, which aims at establishing whether, based on the actual developments in the Period under Consideration, an operator held a dominant position.

<sup>847</sup> See footnote 837 above.

<sup>848</sup> See footnote 599 above.

<sup>849</sup> Competition Policy Newsletter, Number 1-2005: “Two recent veto decisions under the new Regulatory framework for electronic communications: The importance of competition law principles in market analysis”, page 50, available at: <[https://ec.europa.eu/competition/publications/cpn/cpn2005\\_1.pdf](https://ec.europa.eu/competition/publications/cpn/cpn2005_1.pdf)>, accessed June 2020; see also Annex 12 to the Reply to the SO. See also Commission Decision C(2004)3682 of 5 October 2004 pursuant to Article 7(4) of Directive 2002/21/EC, concerning case F1/2004/0082: Access and call origination on public mobile telephone networks in Finland, paragraph 20.

in Norway during the Period under Consideration had limited incentives to compete with Telenor on the wholesale market. Finally, wholesale customers faced considerable switching costs if they decided to change access provider, and they lacked buyer power.

#### 9.2.6.5 Findings from previous margin squeeze cases

628. Lastly, Telenor refers<sup>850</sup> to a number of margin squeeze cases decided upon by the European Commission and/or the European Courts (such as *Deutsche Telekom*, *Telefónica* and *TeliaSonera*), which had in common that the company under investigation had a 100% market share in the relevant wholesale market. According to Telenor, this is a major difference with the current case, since Telenor's market share is below 100% and wholesale customers had alternative suppliers for their access needs (i.e. access specifically provided by Telenor was not an indispensable upstream input). In Telenor's view, this difference calls for a comprehensive assessment of market characteristics, market dynamics and market power (to determine whether Telenor was dominant), as well as of the effects resulting from Telenor's conduct.

629. The Authority observes that a 100% market share is not a requirement for a finding of dominance. As already noted, it is not required for a finding of dominance that the undertaking in question has eliminated all opportunity for competition on the market.<sup>851</sup> The existence of some form of competition in the market does not necessarily rule out a finding of dominance.<sup>852</sup> In fact, even the presence of lively competition on a specific market does not rule out the possibility that an undertaking has a dominant position on that market. The existence of alternative suppliers is therefore not incompatible with a finding of dominance.<sup>853</sup>

630. Moreover, since the facts of each case are different, in this case, the Authority has carried out a comprehensive, holistic assessment of a number of factors<sup>854</sup> in the preceding sections and those factors consistently indicate that Telenor had a dominant position on the relevant wholesale market during the Period under Consideration.

#### 9.2.6.6 Dominance in a putative market for the supply of wholesale access to SPs only

631. Telenor claims that, in a putative market for the supply of wholesale access and origination services on public mobile telephone networks in Norway *to SPs only* (i.e. not including NROs and MVNOs), it would not hold a dominant position.<sup>855</sup> In particular, Telenor points to the following factors:

<sup>850</sup> Reply to the SO, Section 4.6.

<sup>851</sup> Judgment of 14 February 1978, *United Brands*, 27/76, EU:C:1978:22, paragraph 113.

<sup>852</sup> Judgment of 14 February 1978, *United Brands*, 27/76, EU:C:1978:22, paragraphs 113–121; and judgment of 13 February 1979, *Hoffmann-La Roche*, 85/76, EU:C:1979:36, paragraphs 69–78.

<sup>853</sup> As acknowledged by Telenor (Reply to the SO, paragraph 358), it follows from the *TeliaSonera* judgment discussed in Section 10.5.1 below, that indispensability is not a requirement for a finding of an abuse of dominant position consisting of a margin squeeze.

<sup>854</sup> See footnote 837 above.

<sup>855</sup> Reply to the SO, Section 4.4.

- (a) Numerous SPs entered the downstream market during the Period under Consideration;<sup>856</sup>
- (b) Telenor, Telia, NwN, ICE, MVNOs and SPs were all competing for wholesale contracts with SPs during the Period under Consideration;<sup>857</sup>
- (c) In 2006 and 2010, although it found Telenor to have significant market power on the relevant wholesale market, Nkom did not impose access obligations on Telenor with regard to SPs.<sup>858</sup>

632. At the outset, the Authority recalls that, as established in Section 8.2.2 above, and contrary to Telenor's claims, the relevant market at the upstream level in this case comprises all types of access seekers (i.e. NROs, MVNOs and SPs) together. Telenor's argument that, alternatively, it did not have a dominant position in a putative market for the supply of wholesale access and origination services to SPs only is therefore not accepted. The Authority recalls in this respect that, if one looks at retail mobile communications services including residential and business customers together, SPs only achieved a market share which was considerably below 10% during the Period under Consideration.<sup>859</sup> Given these limited volumes at the downstream level, SPs accounted only for a minor share of the wholesale traffic. As a result, any statement regarding market shares or alleged competition in this small segment of the wholesale market should be seen in this context and is likely to provide limited information about access providers' relative strength on the overall wholesale market.
633. In any event, as set out below, the Authority considers that there is sufficient evidence to dismiss Telenor's claim that it was not in a position to act independently of its competitors and customers for the supply of wholesale access to SPs.
634. First, the Authority disagrees with Telenor's statement that the alleged entry of numerous SPs is a strong indication of a well-functioning wholesale market.<sup>860</sup> According to the settled case law referred to in paragraph 455 above, the relevant factors to assess when considering dominance at the wholesale level in the case at hand include market shares, the existence of barriers preventing either potential competitors from having access to the relevant wholesale market (entry barriers) and/or actual competitors from expanding their activities on the relevant wholesale market (expansion barriers), as well as buyer power from customers operating in the relevant retail market. Telenor has not explained how any alleged entry at the retail level would affect the relevant factors mentioned

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<sup>856</sup> Reply to the SO, Section 4.4.2.1.

<sup>857</sup> Reply to the SO, Section 4.4.2.2. According to Telenor, its market share for wholesale access to SPs, calculated on the basis of number of agreements concluded, was around or below 30% throughout the Period under Consideration; see Reply to the SO, paragraph 341.

<sup>858</sup> Reply to the SO, Section 4.4.2.3.

<sup>859</sup> See Nkom's 2016 Market Analysis, Section 5.3.2. In the relevant market at the downstream level in this case (stand-alone MBB provided to residential customers), SPs also achieved only a marginal presence; see Section 9.3 below.

<sup>860</sup> The Authority notes in this respect that, in its letter of 30 August 2016 to the Authority, Telia confirmed that it "did not sign any new service provider customers after 2008" (see Document No 816102, Section 2.1, page 2).

above. In addition, for the reason set out in paragraph 632 above, the Authority considers that entry by SPs at the downstream level cannot be necessarily seen as evidence of effective competition in the supply of access to this specific customer group at the upstream level.<sup>861</sup>

635. Second, regarding Telenor's claim that it was competing with Telia, NwN, ICE, MVNOs and SPs for wholesale contracts with SPs during the Period under Consideration, the Authority observes the following.
636. As far as access provided directly by MNOs to SPs is concerned, as noted in Section 9.2.2.3 above, contrary to Telenor's claims, Telia did not have strong incentives to provide access to wholesale customers at attractive terms and conditions. The Authority does not see any reason why that should not be true for access directly provided by Telia (and Telenor) to SPs in particular. On the contrary, given the low volumes of SPs at the wholesale level, Telia had even fewer incentives to grant favourable wholesale terms and conditions to this category of access seekers as they risked enhancing competition at the retail level.
637. Regarding alleged competition from ICE and Mobile Norway (NwN/Tele2), as set out above, ICE and one of Mobile Norway's joint owners (NwN) provided access to a small number of SPs only during the Period under Consideration. Neither ICE nor Mobile Norway were able to exert a significant competitive constraint on Telenor in the relevant market during that period: see Section 9.2.2.2 above for an explanation of the technological limitations in the case of ICE and the lack of nationwide coverage in the case of both ICE and Mobile Norway.
638. Regarding Telenor's argument that SPs could also be supplied by MVNOs or other SPs (and not just by MNOs) during the Period under Consideration, as also noted by Telenor,<sup>862</sup> Nkom observed in its draft SMP Decision of 2015 that it has not been common practice for operators without their own network to provide such wholesale access.<sup>863</sup> Moreover, it should be recalled that, since MVNOs and SPs did not have their own network, they depended on the wholesale terms agreed with the MNOs to provide in turn access to their external wholesale customers. As noted in Section 9.2.2.3 above, neither Telenor nor Telia had incentives to provide access to their wholesale customers at attractive terms and conditions, since doing so would have risked a 'cannibalisation' of their revenues at the downstream level.<sup>864</sup> It is therefore not credible that MVNOs and

<sup>861</sup> In any event, the Authority notes that, more than by simple entry, the relevant period was also characterised by several bankruptcies, acquisitions and mergers, with the result that the number of SPs did not increase significantly; see, in this respect, Nkom's 2010 Market Analysis, paragraph 93. Moreover, their overall market share remained below 10% throughout the Period under Consideration.

<sup>862</sup> See Reply to the SO, paragraph 336, which refers to paragraph 112 of Nkom's 2015 draft SMP Decision.

<sup>863</sup> The Norwegian NCA also stated that it was not aware that MVNOs and SPs were providing wholesale access to a large extent; see the Norwegian NCA's Decision V2018-20, Section 10.2.4.2 and more in particular paragraph 573: "*Konkurransetilsynet er imidlertid ikke kjent med at MVNO-er og tjenesteleverandører faktisk har tilbudt slik grossisttilgang i stort omfang*"; the Authority's translation: "*However, the [Norwegian NCA] is not aware that MVNOs and service providers actually have offered such wholesale access to a large extent.*".

<sup>864</sup> See also Nkom's 2016 Market Analysis, paragraph 625. On the tension between profitability at the upstream and downstream levels resulting from selling capacity to external wholesale customers, see also the Norwegian

SPs – relying as they were on access provided by established MNOs – would have been able to constrain Telenor in the supply of wholesale access to SPs during the Period under Consideration.

639. On the basis of these considerations, the Authority concludes that, during the Period under Consideration, neither MNOs (Telia, Mobile Norway and ICE) nor MVNOs and SPs would have been able to constrain Telenor to a material extent in a putative market for the supply of wholesale access provided to SPs only (i.e. not including NROs and MVNOs).
640. Third, regarding Telenor’s argument that, in 2006 and 2010, Nkom did not impose access obligations on Telenor with regard to SPs, the Authority observes the following.
641. The Authority notes that both in 2006 and 2010, Nkom concluded that Telenor had SMP on the relevant wholesale market, notwithstanding its finding that there was had competition in the SP segment compared to the other segments. In the present case, the Authority has also come to the conclusion, based on a comprehensive set of factors,<sup>865</sup> that Telenor had a dominant position on the relevant wholesale market during the Period under Consideration. The fact that, in 2006 and 2010, Nkom concluded that the supply of wholesale access to SPs was a segment of the wholesale market where competition worked satisfactorily enough not to warrant a remedy in the form of an access obligation is not in contradiction with the finding that Telenor was dominant on the relevant wholesale market.<sup>866</sup>
642. Finally, the Authority observes that Nkom seeks to impose effective and proportionate remedies<sup>867</sup> based on the nature of the competition problem(s) identified. The Authority notes that, in 2010, Nkom considered that “[a] *key element in this regard* [i.e. whether an access obligation for SPs was necessary] *is also the fact that Network Norway has established itself as a new operator who offers service provider agreements. Service providers can thus choose between three providers of service provider access.*”<sup>868</sup> However, as discussed in this section and in Section 9.2.2.2 above, NwN only acquired a marginal presence on the wholesale market, since its network lacked nationwide

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NCA’s Merger Decision V2015-1, paragraphs 485–488 and 515, and the Norwegian NCA’s Decision V2018-20, Section 10.2.2. See also Telenor’s internal documents quoted in paragraphs 485 and 486 above.

<sup>865</sup> See this Section 9.2.

<sup>866</sup> As noted in paragraph 454 above, settled case law confirms that the existence of some degree of competition is not incompatible with a finding of dominance. Even the existence of lively competition on a particular market does not rule out the possibility that there is a dominant position on that market, since the predominant feature of such a position is the ability of the undertaking concerned to act without having to take account of this competition in its market strategy and without for that reason suffering detrimental effects from such behaviour. See judgment of 30 January 2007, *France Télécom*, T-340/03, EU:T:2007:22, paragraph 101; judgment of 13 February 1979, *Hoffmann-La Roche*, 85/76, EU:C:1979:36, paragraphs 69–78; and judgment of 14 February 1978, *United Brands*, 27/76, EU:C:1978:22, paragraphs 108–129.

<sup>867</sup> In particular, in the case of an access obligation, Nkom balances (i) the objective of stimulating infrastructure-based competition by giving SPs the opportunity to build up, with relatively small investments and low risks, a sufficient customer base allowing them at a later stage to climb up the “ladder of investment”, and (ii) the risk that terms that are too attractive for SPs could reduce their incentives to invest in their own infrastructure.

<sup>868</sup> See Nkom’s 2010 SMP Decision, paragraph 151.

coverage. Moreover, the competitive conditions for SPs worsened since Nkom's 2010 SMP Decision. In particular, in 2016, Nkom concluded that there were no longer clear signs that the competition in offering access to SPs functioned satisfactorily.<sup>869</sup> For these reasons, Nkom decided to impose an access obligation on Telenor with regard to SPs.<sup>870</sup>

### 9.2.7 Conclusion on dominance in the wholesale market

643. In view of Telenor's market shares and the presence of barriers to entry/expansion, the lack of material competitive constraints from existing and/or potential competitors, as well as a lack of countervailing buyer power on the relevant wholesale market, the Authority concludes that Telenor had a dominant position, within the meaning of Article 54 EEA, on the wholesale market for access and origination services on public mobile telephone networks in Norway during the Period under Consideration.<sup>871</sup>

### 9.3 Market power in the retail market for the provision of stand-alone MBB services to residential customers in Norway

644. By way of introduction, the Authority recalls that, according to settled case law, it is not necessary under Article 54 EEA to demonstrate that Telenor was dominant in the relevant downstream retail market in order to establish an abuse of a dominant position in the form of a margin squeeze.<sup>872</sup> Nevertheless, in this section, the Authority briefly presents evidence that supports the conclusion that, during the Period under Consideration, Telenor also had a high degree of market power in the relevant downstream market.

645. First, as shown in Table 10 below, during the Period under Consideration, Telenor was by far the largest provider of stand-alone MBB services to residential customers, with a market share of approximately 50% or above, far higher than the shares held by Telia and ICE.

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<sup>869</sup> In particular, Nkom pointed to the following considerations: the number of SPs that were not owned by either Telenor or Telia had fallen since the previous market analysis; only Telenor and Telia offered wholesale access to SPs; ICE could not be seen as being able to offer attractive SP access; and Telenor had unilaterally included a number of conditions in its SP agreements (for example exclusivity requirements at group level), which would not have been possible if there had been effective competition to offer access to SPs (see Nkom's 2016 SMP Decision, paragraphs 132 and 134).

<sup>870</sup> See Nkom's 2016 SMP Decision, paragraph 139.

<sup>871</sup> As indicated above, Nkom arrived at the same conclusion in its 2006 and 2010 Market Analysis (see footnote 599 above) and the Norwegian NCA recently found that Telenor had a dominant position on this market between 18 August 2010 and 30 June 2014, i.e. the period which was relevant for the Norwegian NCA's case and which partially overlaps with the Period under Consideration in the present case (see the Norwegian NCA's Decision V2018-20). This was confirmed by the Norwegian Competition Tribunal, albeit for a slightly shorter period, i.e. from 18 August 2010 to 6 December 2013 (see the Competition Tribunal's Decision V03/2019, paragraph 580).

<sup>872</sup> See judgment of 30 May 2018 in Case E-6/17 *Fjarskipti* [2018] EFTA Ct. Rep. 78, paragraph 84. See also judgment of 17 February 2011, *TeliaSoneira Sverige*, C-52/09, EU:C:2011:83, paragraph 89; and judgment of 30 November 2000, *Industrie des Poudres Sphériques*, T-5/97, EU:T:2000:278, paragraph 178. As held by the CJEU in its judgment of 14 November 1996, *Tetra Pak II*, C-333/94 P, EU:C:1996:436, paragraphs 27 to 31, the fact that a dominant undertaking's abusive conduct has its adverse effects on a market distinct from the dominated one does not detract from the applicability of Article 102 TFEU. See also *Telefónica* Decision, paragraphs 243 and 284.

Table 10: Retail market shares – residential MBB services

## a) Number of subscribers

Company	2008	2009	2010	2011	2012
Telenor	52.4%	49.0%	46.4%	51.1%	51.8%
Telia	32.3%	35.9%	34.5%	27.0%	24.4%
ICE	14.1%	10.9%	15.0%	16.4%	19.8%
Other	1.2%	4.3%	4.1%	5.5%	4.1%

## b) Revenues

Company	2008	2009	2010	2011	2012
Telenor	50.0%	55.5%	51.4%	48.2%	49.0%
Telia	14.9%	23.6%	32.2%	26.3%	22.1%
ICE	34.1%	17.3%	11.2%	21.4%	24.7%
Other	1.0%	3.6%	5.3%	4.1%	4.1%

Source: Nkom's 2014 statistics on Norwegian e-com markets (disaggregated figures).<sup>873</sup>

646. In this respect, the Authority notes that Telenor itself, in an internal memorandum to Telenor's management of October 2010, described the MBB market as a duopoly between itself and Telia.<sup>874</sup>
647. Further, as noted in Section 9.2.2.3 above, neither Telenor nor Telia (Telenor's only real competitor the relevant wholesale market) had incentives to provide wholesale access to their customers at attractive terms, as doing so would have risked increased competition at the downstream level and therefore a 'cannibalisation' of their revenues at that level.<sup>875</sup> Hence, the fact that these MNOs could influence the input costs of their competitors affected the ability of the latter to compete with the MNOs in the downstream market.
648. The Authority notes further that the wholesale customers of Telenor could not compete vigorously on the downstream market, given the unfavourable terms provided by Telenor, which – in combination with the retail prices for residential stand-alone MBB – resulted in margin squeezes during the Period under Consideration (or a substantial part

<sup>873</sup> The Authority's calculations (see Document No 1076159) are based on disaggregated Nkom figures from its 2014 e-com market report (see Document No 781987 – disaggregated Nkom figures from its 2014 e-com market report).

<sup>874</sup> See Document No 656746 – JN1 31, internal memorandum to Telenor's management of October 2010, page 4.

<sup>875</sup> See also Nkom's 2016 Market Analysis, paragraph 625.

of it).<sup>876</sup> As explained paragraph 373 above and shown in Annex 2 to this Decision, including an Appendix and the accompanying Excel spreadsheet model,<sup>877</sup> the same applied to Telia's wholesale customers, which also earned or would have earned negative margins when providing residential stand-alone MBB services during the Period under Consideration.

649. Finally, as also accepted by Telenor, the latter benefitted from the fact that it had an established brand,<sup>878</sup> something which MBB customers tended to prefer and which was, according to Telenor, the main reason why it was more successful among MBB customers than other MNOs (Telia and ICE) and especially NROs and MVNOs.<sup>879</sup> According to Nkom, the fact that Telenor was firmly perceived to have a better network than its competitors and that it had the best distribution network for its products and services also provided it with important advantages over its rivals.<sup>880</sup>
650. In light of these considerations, the Authority concludes that, during the Period under Consideration, Telenor had a high degree of market power in the market for the provision of stand-alone MBB services sold to residential customers in Norway.

#### 9.4 Substantial part of the EEA

651. Both relevant markets in the present Decision cover the entire territory of Norway and constitute in themselves substantial parts of the EEA.

### 10 THE ABUSE: MARGIN SQUEEZE

#### 10.1 Introduction

652. The fact that an undertaking holds a dominant position is not in itself contrary to the EEA competition rules. However, an undertaking enjoying a dominant position has a special responsibility, which requires it to ensure that its conduct does not impair effective and undistorted competition in the EEA internal market.<sup>881</sup> As a result, a dominant undertaking is subject to certain limitations that do not apply to other undertakings. A practice which would be unobjectionable under normal circumstances can amount to an abuse if carried out by an undertaking in a dominant position.<sup>882</sup>

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<sup>876</sup> See Section 10 below.

<sup>877</sup> See footnote 518 above.

<sup>878</sup> See Document No 733491, agreed minutes of a meeting held on 11 December 2014 between the Authority and Telenor; and Document No 732676, Telenor presentation of 11 December 2014, page 66.

<sup>879</sup> See Document No 733491, agreed minutes of a meeting held on 11 December 2014 between the Authority and Telenor.

<sup>880</sup> Nkom's draft 2014 Market Analysis, Section 5.8.

<sup>881</sup> See for example: judgment of 18 April 2012 in Case E-15/10 *Posten Norge* [2012] EFTA Ct. Rep. 246, paragraph 127, and judgment of 30 May 2018 in Case E-6/17 *Fjararskipi* [2018] EFTA Ct. Rep. 78, paragraph 58; see also judgment of 6 September 2017, *Intel*, C-413/14 P, EU:C:2017:632, paragraph 135 and the case law cited.

<sup>882</sup> Judgment of 9 November 1983, *Michelin I*, 322/81, EU:C:1983:313, paragraph 57, and judgment of 17 July 1998; *ITT Promedia*, T-111/96, EU:T:1998:183, paragraph 139.

653. According to settled case law, the concept of an abuse within the meaning of Article 54 EEA is “*an objective concept relating to the behaviour of an undertaking in a dominant position which is such as to influence the structure of a market where, as a result of the very presence of the undertaking in question, the degree of competition is weakened and which, through recourse to methods different from those governing normal competition in products or services on the basis of transactions of commercial operators, has the effect of hindering the maintenance of the degree of competition still existing in the market or the growth of that competition*”.<sup>883</sup>
654. The effect to which that case law refers does not necessarily relate to any concrete or actual effect of the dominant undertaking’s behaviour. For the purposes of establishing an infringement of Article 54 EEA, it is sufficient to show that the conduct of the dominant undertaking tends to restrict competition or is capable of having that effect.<sup>884</sup>
655. Article 54 EEA aims at preventing not only those practices that may cause damage to customers or to consumers directly, but also those that are detrimental to them through their impact on the competitive structure and thus on competition as such.<sup>885</sup>

## 10.2 Margin squeeze

656. A margin squeeze constitutes an independent form of abuse within the meaning of Article 54 EEA.<sup>886</sup>
657. In the following sections, the Authority will demonstrate that Telenor abused its dominant position in the wholesale (upstream) market for the supply of access and origination services on public mobile telephone networks in Norway, within the meaning of Article 54 EEA. The infringements of Article 54 EEA took the form of margin squeezes between the prices charged by Telenor at the wholesale (upstream) level and

<sup>883</sup> Judgment of 13 February 1979, *Hoffmann-La Roche*, 85/76, EU:C:1979:36, paragraph 91. See also, for example: judgment of 3 July 1991, *AKZO*, 62/86, EU:C:1991:286, paragraph 69; judgment of 7 October 1999, *Irish Sugar*, T-228/97, EU:T:1999:246, paragraph 111; judgment of 17 December 2003, *British Airways*, T-219/99, EU:T:2003:343, paragraph 241; judgment of 10 April 2008, *Deutsche Telekom*, T-271/03, EU:T:2008:101, paragraph 233.

<sup>884</sup> Judgment of 18 April 2012 in Case E-15/10 *Posten Norge* [2012] EFTA Ct. Rep. 246, paragraph 189; see also judgment of 29 March 2012, *Telefónica*, T-336/07, EU:T:2012:172, paragraph 268; judgment of 17 December 2003, *British Airways*, T-219/99, EU:T:2003:343, paragraph 293 (upheld on appeal: judgment of 15 March 2007, C-95/04 P, EU:C:2007:166); and judgment of 30 September 2003, *Michelin II*, T-203/01, EU:T:2003:250, paragraph 239.

<sup>885</sup> Judgment of 18 April 2012 in Case E-15/10 *Posten Norge* [2012] EFTA Ct. Rep. 246, paragraph 127; see also judgment of 21 February 1973, *Europemballage Corporation and Continental Can Company*, 6/72, EU:C:1973:22, paragraph 26; judgment of 13 February 1979, *Hoffmann-La Roche*, 85/76, EU:C:1979:36, paragraph 125; judgment of 15 March 2007, *British Airways*, C-95/04 P, EU:C:2007:166, paragraph 106.

<sup>886</sup> Judgment of 30 May 2018 in Case E-6/17 *Fjarsskipti* [2018] EFTA Ct. Rep. 78, paragraph 58. See also judgment of 14 October 2010, *Deutsche Telekom*, C-280/08 P, EU:C:2010:603, paragraph 183; judgment of 17 February 2011, *TeliaSonera Sverige*, C-52/09, EU:C:2011:83, paragraph 31; and judgment of 10 July 2014, *Telefónica*, C-295/12 P, EU:C:2014:2062, paragraph 75.

the prices charged by Telenor at the retail (downstream) level for the provision of stand-alone MBB services to residential customers in Norway.<sup>887</sup>

658. In *Industrie des poudres sphériques*, the GCEU held that a margin squeeze “*may be said to take place when an undertaking which is in a dominant position on the market for an unprocessed product and itself uses part of its production for the manufacture of a more processed product, while at the same time selling off surplus unprocessed product on the market, sets the price at which it sells the unprocessed product at such a level that those who purchase it do not have a sufficient profit margin on the processing to remain competitive on the market for the processed product*”.<sup>888</sup>
659. Referring to the judgment of the CJEU in *TeliaSonera*,<sup>889</sup> the EFTA Court confirmed that a margin squeeze “*may occur, for example, where a dominant undertaking in a wholesale market offers services to undertakings with which the dominant undertaking competes on a retail market where the service offered is an input. A margin squeeze exists if, inter alia, the spread between the wholesale price charged to competitors and the retail price charged to the dominant undertaking’s own customers is negative or insufficient to cover the costs the dominant undertaking has to incur in order to supply the retail service. When this is the case, competitors as efficient as the dominant undertaking can compete on the retail market only at a loss or at artificially reduced levels of profitability*”.<sup>890</sup>
660. Thus, a margin squeeze will exist where the difference (the spread) between the wholesale price charged by the dominant undertaking to competitors at the upstream level and the retail price that the dominant undertaking’s own customers pay at the downstream level (the “gross margin”) is negative, or where the gross margin is insufficient for equally efficient competitors to cover the specific costs which the dominant undertaking incurs in order to sell its own products or services at the downstream level.<sup>891</sup> In such circumstances, although competitors may be as efficient as the dominant undertaking, they cannot operate on the downstream market in a profitable way.<sup>892</sup>
661. For a vertically-integrated undertaking (such as Telenor) to be found to have engaged in an abusive margin squeeze, it is necessary that the undertaking is dominant in the upstream market. However, it is not necessary that the undertaking is also dominant in

<sup>887</sup> In this section, the term “upstream level” refers to the relevant wholesale market for the supply of access and origination services on public mobile telephone networks in Norway and the term “downstream level” refers to the relevant retail market for the provision of stand-alone MBB services to residential customers in Norway.

<sup>888</sup> Judgment of 30 November 2000, *Industrie des poudres sphériques*, T-5/97, EU:T:2000:278, paragraph 178.

<sup>889</sup> Judgment of 17 February 2011, *TeliaSonera Sverige*, C-52/09, EU:C:2011:83, paragraphs 32–33.

<sup>890</sup> Judgment of 30 May 2018 in Case E-6/17 *FjarSKIPTI* [2018] EFTA Ct. Rep. 78, paragraph 59. See also: *Deutsche Telekom* Decision, paragraph 107; *Telefónica* Decision, paragraphs 281–284 and *Slovak Telekom* Decision, paragraph 823.

<sup>891</sup> Judgment of 30 May 2018 in Case E-6/17 *FjarSKIPTI* [2018] EFTA Ct. Rep. 78, paragraph 59, referring to judgment of 17 February 2011, *TeliaSonera Sverige*, C-52/09, EU:C:2011:83, paragraphs 32 and 33. From the definition, it follows that a margin squeeze can result from wholesale prices which are set at a too high level and/or from retail prices set too low.

<sup>892</sup> Judgment of 17 February 2011, *TeliaSonera Sverige*, C-52/09, EU:C:2011:83, paragraph 33 and judgment of 30 November 2000, *Industrie des poudres sphériques*, T-5/97, EU:T:2000:278, paragraph 178.

the downstream market in order to conclude that it has engaged in an abusive margin squeeze.<sup>893</sup>

662. Moreover, in order to establish that a margin squeeze is abusive, that practice must have an anti-competitive effect in the market. However, the effect does not necessarily have to be concrete. It is sufficient to demonstrate that there is an anti-competitive effect which may potentially exclude from the market competitors which are at least as efficient as the dominant undertaking.<sup>894</sup> The fact that the desired result, namely the exclusion of such competitors, is not ultimately achieved, does not alter the categorisation as an abuse within the meaning of Article 54 EEA.<sup>895</sup>

### 10.3 Methodology for the margin squeeze assessment

#### 10.3.1 Introduction

663. This section sets out the four main elements of the margin squeeze test carried out by the Authority in the present case, namely:

- (a) The level of efficiency of (potential) competitors is assessed on the basis of the ‘equally efficient competitor’ or “EEC” test (Section 10.3.2);
- (b) The appropriate cost standard applied in the analysis is Telenor’s long-run average incremental costs (“LRAIC”) (Section 10.3.3);
- (c) The profitability analysis is carried out on the basis of a period-by-period methodology (Section 10.3.4); and
- (d) The level of product/customer aggregation used is the aggregated portfolio of all retail products/services sold by Telenor in the relevant downstream market (Section 10.3.5).

664. The established purpose of a margin squeeze test is to identify whether or not a dominant company’s own downstream operations could trade profitably on the basis of the upstream price charged by the dominant company to its competitors.

#### 10.3.2 The ‘equally efficient competitor’ test

665. As indicated in Section 10.2 above, the existence of a margin squeeze can be demonstrated on the basis of an EEC test, i.e. by showing that the dominant undertaking’s own downstream affiliate could not operate profitably on the downstream market, taking into account:

<sup>893</sup> Judgment of 30 May 2018 in Case E-6/17 *FjarSKIPTI* [2018] EFTA Ct. Rep. 78, paragraphs 81 and 84; see also judgment of 30 November 2000, *Industrie des poudres sphériques*, T-5/97, EU:T:2000:278; judgment of 14 November 1996, *Tetra Pak II*, C-333/94 P, EU:C:1996:436, paragraphs 27 to 31; and judgment of 17 February 2011, *TeliaSonera Sverige*, C-52/09, EU:C:2011:83, paragraphs 83–89.

<sup>894</sup> Judgment of 30 May 2018 in Case E-6/17 *FjarSKIPTI* [2018] EFTA Ct. Rep. 78, paragraph 62; see also judgment of 17 February 2011, *TeliaSonera Sverige*, C-52/09, EU:C:2011:83, paragraph 64.

<sup>895</sup> Judgment of 17 February 2011, *TeliaSonera Sverige*, C-52/09, EU:C:2011:83, paragraph 65, and judgment of 10 July 2014, *Telefónica*, C-295/12 P, EU:C:2014:2062, paragraph 124.

- (a) the wholesale price charged by the dominant undertaking to wholesale customers, which are competitors of its downstream affiliate on the downstream market; and
- (b) the retail price charged by the dominant undertaking's downstream affiliate to final customers on the downstream market.

666. This approach tests whether equally efficient competitors on the downstream market would be able to compete effectively if they had the same costs as the vertically-integrated firm. If not, competitors on the downstream market that are able to provide services to end users as efficiently as the dominant firm would be foreclosed from the market. This approach is consistent with the approach of the Commission in the *Slovak Telekom* case,<sup>896</sup> in the *Telefónica* and *Deutsche Telekom* cases,<sup>897</sup> as well as in *Napier Brown*.<sup>898</sup> The relevance of the equally efficient competitor test for the assessment of a margin squeeze was upheld by the EFTA Court in the *FjarSKIPTI* case<sup>899</sup> and by the CJEU in the *Deutsche Telekom* and *TeliaSonera* cases.<sup>900</sup>

667. In the *TeliaSonera* case, the CJEU held that, in certain circumstances, the costs and prices of competitors (instead of those of the dominant company) may be relevant for determining the existence of a margin squeeze (the so-called 'reasonably efficient competitor' test, based on retail costs and prices of a reasonably efficient competitor instead of those of the dominant company). This may be the case, in particular, when the service supplied to competitors consists of the mere use of infrastructure, the production cost of which has already been written off by the dominant firm. It may also be the case when the particular market conditions of competition dictate it, because, for example, the level of the dominant undertaking's costs is specifically attributable to the competitively advantageous situation in which its dominant position places it.<sup>901</sup>

<sup>896</sup> *Slovak Telekom* Decision, paragraphs 828–830. The GCEU confirmed the Commission's approach in its judgment of 13 December 2018, *Slovak Telekom*, T-851/14, EU:T:2018:929 (see paragraphs 108 and 227–239).

<sup>897</sup> *Telefónica* Decision, paragraph 312 (confirmed on appeal: judgment of 29 March 2012, *Telefónica*, T-336/07, EU:T:2012:172, and judgment of 29 March 2012, *Spain v Commission*, T-398/07, EU:T:2012:173, and judgment of 10 July 2014, *Telefónica*, C-295/12 P, EU:C:2014:2062). *Deutsche Telekom* Decision, paragraph 107 (confirmed on appeal: judgment of 14 October 2010, *Deutsche Telekom*, C-280/08 P, EU:C:2010:603). The Commission found that each of *Telefónica* and *Deutsche Telekom* abused their dominant position in the form of a margin squeeze. The squeeze resulted from the difference between the retail prices charged by the dominant undertaking to end customers and the wholesale prices charged to its competitors, which was negative or insufficient to cover the dominant undertaking's product-specific costs of providing its own retail services on the downstream market.

<sup>898</sup> Commission Decision of 18 July 1988 in Case 88/518/EEC – *Napier Brown-British Sugar* ("Napier Brown Decision"), OJ L 284, 19.10.1988, p. 41, paragraph 66. In this case, the Commission referred to the dominant undertaking's failure to reflect its own costs of transforming the raw material into the derived product in the margin between the upstream and downstream price.

<sup>899</sup> Judgment of 30 May 2018 in Case E-6/17 *FjarSKIPTI* [2018] EFTA Ct. Rep. 78, paragraphs 63–64.

<sup>900</sup> Judgment of 14 October 2010, *Deutsche Telekom*, C-280/08 P, EU:C:2010:603, paragraphs 200–204, and judgment of 17 February 2011, *TeliaSonera Sverige*, C-52/09, EU:C:2011:83, paragraphs 31–34.

<sup>901</sup> Judgment of 17 February 2011, *TeliaSonera Sverige*, C-52/09, EU:C:2011:83, paragraph 45.

668. Some of the circumstances described by the CJEU in *TeliaSonera* may be present in the case at hand. For example, given the economies of scale and scope enjoyed by Telenor, its unit costs can be expected to be lower than those of its reasonably efficient competitors.
669. In this case, however, the Authority has deliberately taken a conservative approach. In particular, the Authority has not considered it necessary to use a ‘reasonably efficient competitor’ test, because margin squeezes occurred even on the basis of an ‘equally efficient competitor’ test (that is more favourable to Telenor).
670. The Authority has therefore applied the EEC test in assessing the margin squeeze practices in this case. In other words, it has assessed whether Telenor would have been able to offer the relevant downstream services without incurring a loss if, during the Period under Consideration, its retail division had paid the wholesale price that Telenor charged to its competitors, while taking into account its own downstream prices and incurring its own downstream costs.
671. In the course of the proceedings, Telenor has agreed with the Authority that the EEC test is the correct one to apply.<sup>902</sup>

### 10.3.3 *The cost standard: Telenor’s long-run average incremental costs (“LRAIC”)*

672. The Authority considers the long-run average incremental costs (“LRAIC”) to be the relevant cost measure to assess the existence of a margin squeeze in this case. This is also consistent with the practice of the European Commission, as upheld by the European Courts.<sup>903</sup>
673. LRAIC is the average of all costs (fixed and variable) that an undertaking incurs in order to produce a particular additional product or service in the long run.<sup>904</sup> The Authority considers that this is the lowest measure of costs that would allow an equally efficient competitor to compete against Telenor in the long run.
674. The incremental costs refer to the difference between:
- i) the total costs incurred by the undertaking when producing all of the products (or services) it produces, including the individual product (or service) under investigation (i.e. in the present case, stand-alone MBB services supplied to residential customers); and
  - ii) the total costs incurred by the undertaking when the output of the individual product (or service) under investigation is set at zero, holding the output of all other products (or services) fixed.

<sup>902</sup> See Reply to the SO, paragraph 365.

<sup>903</sup> See *Deutsche Telekom* Decision (upheld on appeal in C-280/08 P, EU:C:2010:603); and *Telefónica* Decision (upheld on appeal in *Telefónica*, T-336/07, EU:T:2012:172). See also *Slovak Telekom* Decision, Section 8.2.4. The GCEU confirmed the application of LRAIC as the correct cost model for purposes of margin squeeze in its judgment of 13 December 2018, *Slovak Telekom*, T-851/14, EU:T:2018:929, paragraphs 211–239.

<sup>904</sup> See *Telefónica* Decision, paragraph 319.

675. Such incremental costs include not only all variable and fixed costs directly attributable to the production of the total volume of output of the product (or service) in question, but also the increase in common costs attributable to such production.<sup>905</sup>
676. If the revenues associated with the downstream activity fall below the incremental costs in the long run, a rational and profit-maximising firm at least as efficient as Telenor – in particular enjoying the same economies of scale and scope – *“has no economic interest in offering downstream services in the medium term. It could increase its overall result by either raising downstream prices to cover the additional costs of providing the service or – where there is no demand for this service at a higher price, [...] discontinue providing the service.”*<sup>906</sup>
677. Thus, a margin squeeze will result if the difference between Telenor’s upstream and downstream prices of the relevant products/services in the present case, i.e. the gross margin, were to fall below the LRAIC of Telenor’s own downstream operations for providing residential stand-alone MBB.
678. In the course of the proceedings, Telenor has agreed with the Authority that LRAIC is the relevant cost measure to use.<sup>907</sup>
679. In any event, in the present case, as explained in Section 10.4.4 below, the Authority has found that it is not necessary to consider downstream costs in detail, since margin squeezes can be established by considering only the gross margins (i.e. the difference between Telenor’s upstream and downstream prices).

### 10.3.4 The profitability test: period-by-period assessment

680. As stated above in Section 10.2, a margin squeeze test entails assessing whether the vertically-integrated undertaking’s own downstream affiliate could operate profitably on the basis of the upstream price charged to its competitors by its upstream affiliate.
681. There are two main methods by which profitability can be measured: a historical period-by-period method or a discounted cash flow (“DCF”) method. Both methods address the same underlying issue of cost recovery over time, but in different ways.<sup>908</sup>
682. The period-by-period method compares revenues and costs extracted from the undertaking’s accounts (in which investment expenditure has been gradually written off over appropriate periods of time) in each individual reference period (e.g. a month or year). With a DCF approach, overall profitability is assessed over a longer period (in general, several years). The vertically-integrated undertaking’s future growth is taken

<sup>905</sup> See *Telefónica* Decision, paragraph 319; and *Slovak Telekom* Decision, paragraph 861.

<sup>906</sup> See *Telefónica* Decision, paragraph 321; and Commission Decision of 20 March 2001 in Case COMP/35.141 – *Deutsche Post AG*, OJ L 125, 5.5.2001, p. 27, paragraph 36.

<sup>907</sup> See Reply to the SO, paragraph 365 and Annex 13 to the Reply to the SO, paragraphs 5 and 19–23. Telenor agrees that in this case LRAIC should be interpreted as the average of the long-run incremental cost (“LRIC”) of the increment in question in the present case (i.e. of supplying stand-alone MBB to residential customers).

<sup>908</sup> See, for example, *Telefónica* Decision, paragraph 330.

into account in the profitability analysis by aggregating and discounting cash flows over time in order to arrive at a single measure, the net present value (“NPV”).

683. In the *Wanadoo* judgment, the GCEU held that: (i) the Commission is afforded a broad discretion in the choice of the calculation of the cost recovery of a dominant company; and (ii) it is for the dominant company to prove that the method used by the Commission is unlawful.<sup>909</sup> The practice of the Commission, as accepted by the EU Courts, in cases involving pricing abuses (in particular, predatory pricing and margin squeeze) has been to assess the profitability of the dominant undertaking using the period-by-period method.<sup>910</sup>
684. In this case, the Authority has conducted the margin squeeze analysis using the period-by-period approach. This approach has the advantage of being based on actual data only (as opposed to the DCF method, which in part relies on forecasts and assumptions) and of showing whether Telenor’s downstream arm has been profitable in each individual period (e.g. a month or year).
685. In addition, the potential accounting distortions<sup>911</sup> normally associated with the period-by-period approach are not relevant in the present case, because it is not necessary to consider downstream costs in detail, in order to conclude on the existence of a margin squeeze (see Section 10.4.4 below).
686. In the course of the proceedings, Telenor has agreed with the Authority that the profitability test should be based on a period-by-period assessment.<sup>912</sup>

### 10.3.5 The appropriate level of product aggregation

#### 10.3.5.1 Introduction

687. During the Period under Consideration, Telenor offered a wide range of stand-alone MBB tariff plans to residential customers. This leads to the question of the aggregation level at which the margin squeeze test should be applied, i.e. which retail services and tariff plans should be included in the test. The margin squeeze test can be done either: (i) at the highest level of detail (i.e. at the level of each individual offer/tariff plan) or (ii) at

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<sup>909</sup> Judgment of 30 January 2007, *France Télécom*, T-340/03, EU:T:2007:22, paragraphs 129 and 153.

<sup>910</sup> See, for example, judgment of 3 July 1991, *AKZO*, 62/86, EU:C:1991:286, and judgment of 14 November 1996, *Tetra Pak II*, C-333/94 P, EU:C:1996:436. In its *Slovak Telekom* Decision, the Commission used the period-by-period approach; see paragraphs 843–859. In its *Telefónica* Decision, the Commission also used the period-by-period approach and it took the view that there were certain shortcomings in the DCF approach when used to detect a margin squeeze: see paragraphs 332–349. For example, a positive NPV may be the result of anti-competitive behaviour, where losses in the short-term lead to higher long-run profits due to the strengthening of the dominant undertaking’s market power.

<sup>911</sup> These distortions include having to depreciate certain downstream costs, such as customer acquisition costs (which are likely to be significant for Telenor’s competitors in the case of a new product such as MBB), over the average customer lifetime in a period-by-period framework.

<sup>912</sup> See the Reply to the SO, paragraph 365.

the aggregate portfolio level (i.e. at the level of the mix of tariff plans marketed on the relevant retail market).

688. Although in some circumstances it may be appropriate to conduct the test at the level of each individual offer,<sup>913</sup> in the case at hand, the margin squeeze test has been conducted on the basis of an aggregated approach, i.e. on the basis of all the tariff plans marketed by Telenor on the relevant retail market. This “aggregated approach” is based on the principle that competitors or new entrants must at least be able to profitably replicate Telenor’s product pattern in the relevant retail market.<sup>914</sup> This approach is favourable to Telenor, since it gives it maximal flexibility to spread the costs which are common to its retail tariff plans/services on the relevant retail market (provided that the margin squeeze test yields a positive margin with the aggregated approach).
689. In the present case, the Authority concludes that the relevant product market at the downstream level consists of the supply of stand-alone MBB services to residential customers.<sup>915</sup> Consequently, it conducts the margin squeeze test taking into consideration Telenor’s entire portfolio of stand-alone MBB tariff plans offered to residential customers in Norway during the Period under Consideration, using a weighted average.
690. As explained below, the Authority’s approach is consistent with the European Commission’s practice and EU case law.

#### 10.3.5.2 *The relevant market as the starting point*

691. Conducting the margin squeeze test at a level of product aggregation consistent with the relevant product market is in line with established competition law principles.
692. The purpose of defining the relevant market is to establish the framework within which competition law and policy is applied. The Authority refers to its Notice on the definition of the relevant market, which describes market definition as “*a tool to identify and define the boundaries of competition between firms*”.<sup>916</sup>
693. As the main concern associated with Telenor’s pricing behaviour in the present case is the potential foreclosure of competitors, it is consistent with competition law principles and standard competition law analysis to assess the scope for such foreclosure at the level of the relevant retail market. As the GCEU noted in its *Telefónica* judgment: “*the*

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<sup>913</sup> This would, for example, be the case for a new offer giving rise to a margin squeeze, which is currently subsidised by other profitable offers but whose volumes could increase substantially in the future, subsequently leading to an overall negative margin in the future.

<sup>914</sup> See *Telefónica* Decision, paragraph 388.

<sup>915</sup> See Section 8.4 above.

<sup>916</sup> Notice on the definition of the relevant market, paragraph 2. See also judgment of 25 March 2015, *Slovenská pošta*, T-556/08, EU:T:2015:189, paragraph 200, and judgment of 11 December 2003, *Adriatica di Navigazione*, T-61/99, EU:T:2003:335, paragraphs 27 and 34.

*determination of the relevant market serves to evaluate whether the undertaking concerned is able to hinder effective competition on that market”.*<sup>917</sup>

694. The objective of a margin squeeze test is to avoid the exclusion of equally efficient competitors from the market. It is therefore appropriate to apply a level of aggregation which corresponds to the relevant market as defined in accordance with competition law principles.
695. To define a relevant retail market as comprising service A only, but then to test for potential foreclosure effects at a multi-market level comprising services A + B, risks undermining the very role of market definition in cases involving competition law.
696. The method for determining whether there is a margin squeeze is based on the principle that the tariffs charged by the established operator (in the present case, Telenor) must enable competitors to compete with that operator effectively on the relevant retail market. Equally efficient actual or potential competitors should at least be able to replicate the established operator’s customer pattern on the relevant retail market. The relevant retail market is in this case the broadest possible aggregation level at which the margin squeeze test should be done.<sup>918</sup>
697. As shown in the next sections, this is in line with the European Commission’s practice and EU case law.

### 10.3.5.3 *The European Commission’s practice and EU case law*

#### 10.3.5.3.1 *Telefónica case*

698. In its *Telefónica* Decision, the Commission defined the following relevant retail market: “*all the standard broadband products, whether provided through ADSL or any other technology, marketed in the ‘mass market’ for both residential and non-residential users*”.<sup>919</sup>
699. Faced with the issue that Telefónica offered a wide range of retail standard broadband products with a correspondingly wide range of prices, the Commission examined the question of whether the margin squeeze test should be conducted at: (i) a very granular level (i.e. at the level of each individual offer); or (ii) the aggregate portfolio level (i.e. at the level of the mix of services sold by the company (Telefónica) on the retail market).<sup>920</sup>
700. While the Commission considered that it may be appropriate in some circumstances to conduct the test at the level of each individual offer, it conducted the margin squeeze test on the basis of an aggregated approach, i.e. “*on the basis of the mix of services marketed*

<sup>917</sup> Judgment of 29 March 2012, *Telefónica*, T-336/07, EU:T:2012:172, paragraph 201.

<sup>918</sup> As indicated above, in some circumstances it may be appropriate to conduct the test at a level that is narrower than the relevant retail market (see footnote 913 above).

<sup>919</sup> *Telefónica* Decision, paragraphs 152–161. This market excluded tailor-made broadband solutions, which were mainly targeted at large corporations.

<sup>920</sup> *Telefónica* Decision, paragraph 386.

by *Telefónica on the relevant retail market*<sup>921</sup> According to the Commission, this approach “is based on the principle that competitors must at least be able to profitably replicate *Telefónica’s* product pattern”. It added that this “is the approach most favourable to *Telefónica*, since it gives it maximal flexibility to spread the costs which are common to its retail products”.<sup>922</sup>

701. This shows that the starting point is the relevant retail market. Once the relevant retail market has been defined, the question arises whether the margin squeeze test should be conducted at the aggregate portfolio level, i.e. including all tariff plans offered by the established operator in the relevant retail market, or at a more granular level.
702. At the upstream level, the Commission in *Telefónica* defined two separate relevant wholesale product markets, i.e. regional and national wholesale broadband access.<sup>923</sup> The Commission again took the relevant market as the starting point and conducted a separate margin squeeze test for each wholesale product which belonged to a separate product market. It rejected *Telefónica’s* argument that alternative operators would use an optimal combination of *Telefónica’s* wholesale products.<sup>924</sup>
703. The GCEU upheld the Commission’s approach. In particular, the GCEU noted: “*In fact, it has been held, first, [...] that the Commission was correct to take the view that local loop unbundling, the national wholesale product and the regional wholesale product do not belong to the same market and, second, [...] that a margin squeeze on a relevant market was in itself likely to constitute an abuse within the meaning of Article [102 TFEU]. As the determination of the relevant market serves to evaluate whether the undertaking concerned is able to hinder effective competition on that market, the applicants cannot claim, [...], that the use of an optimal combination of wholesale products would enable Telefónica’s competitors to improve their profitability. Those wholesale products are not part of the same product market [...]*”<sup>925</sup>
704. The CJEU confirmed the GCEU’s judgment.<sup>926</sup>

<sup>921</sup> *Telefónica* Decision, paragraph 388; emphasis added by the Authority.

<sup>922</sup> *Telefónica* Decision, paragraph 388.

<sup>923</sup> See *Telefónica* Decision, paragraph 208. The Commission noted, however, that the precise boundaries between the regional and national wholesale markets were not determinative, because *Telefónica* was dominant in both of them and a margin squeeze had been found for both the regional wholesale access product and the national wholesale access product separately.

<sup>924</sup> *Telefónica* Decision, paragraphs 389–396.

<sup>925</sup> Judgment of 29 March 2012, *Telefónica*, T-336/07, EU:T:2012:172, paragraphs 201–202; emphasis added by the Authority.

<sup>926</sup> Judgment of 10 July 2014, *Telefónica*, C-295/12 P, EU:C:2014:2062.

### 10.3.5.3.2 *Slovak Telekom case*

705. In the *Slovak Telekom Decision*,<sup>927</sup> the Commission defined the relevant retail market as the retail market for broadband services at a fixed location (FBB), which included “*retail broadband services provided via DSL, fibre, cable TV and FWA networks*”.<sup>928</sup>
706. When determining the aggregation level, the Commission, like in the *Telefónica Decision*, starts by noting that a margin squeeze test can be conducted either at the highest level of detail (i.e. at the level of each individual offer), or at the aggregate portfolio level (i.e. at the level of the mix of services marketed on the retail market).<sup>929</sup> The Commission again opted for the aggregated approach and conducted its test on the basis of the mix of services marketed by Slovak Telekom on the relevant retail market, i.e. on the basis of all of Slovak Telekom’s FBB retail services as they evolved over time.<sup>930</sup> Like in the *Telefónica Decision*, the Commission stated that the aggregated approach is based on the principle that competitors must at least be able to replicate Slovak Telekom’s portfolio of retail services on the relevant market. It again added that “*the aggregated approach is consistent with a hypothetical entrant’s internal decision-making process in that it assesses the profitability of its investment based on the complete range of services that it is able to offer in the relevant downstream market*”.<sup>931</sup> That starting point was therefore again the relevant retail market.

### 10.3.5.3.3 *Deutsche Telekom case*

707. In the *Deutsche Telekom Decision*, the Commission defined two separate relevant retail markets, i.e. retail local access for (i) narrowband services (i.e. analogue and ISDN)<sup>932</sup>

<sup>927</sup> The decision was upheld by judgment of 13 December 2018, *Slovak Telekom*, T-851/14, EU:T:2018:929, in which the GCEU confirmed that Slovak Telekom had breached Article 102 TFEU by engaging in constructive refusal to supply and margin squeeze (although it reduced the fine). The GCEU took the same approach in the related appeal brought by Slovak Telekom’s parent company, Deutsche Telekom: see judgment of 13 December 2018, *Deutsche Telekom v. Commission*, T-827/14, EU:T:2018:930.

<sup>928</sup> *Slovak Telekom Decision*, paragraph 173.

<sup>929</sup> *Slovak Telekom Decision*, Section 8.2.2.

<sup>930</sup> See *Slovak Telekom Decision*, Section 8.3.1. The Commission then did an additional price squeeze test including additional services (i.e. voice access and voice usage, IP television and multi-play services), “*in order to establish that in this case, the inclusion of the voice services does not alter the finding of the Commission on margin squeeze*” (*Slovak Telekom Decision*, paragraphs 840 and 842). However, this was only done by way of a sensitivity check, in response to arguments made by Slovak Telekom: See *Slovak Telekom Decision*, paragraph 1009, with regard to the inclusion of voice access and calls: “*The Commission reiterates that the bundles including voice access and usage services serve as a sensitivity check because these markets are not addressed by the present Decision*”; and paragraphs 1016 and 1020 with regard to the inclusion of IP TV and multi-play services. See also paragraph 1023, where the Commission’s conclusion also clearly shows that the inclusion of these other services was done by way of sensitivity check. There is no support in the *Slovak Telekom decision* for Telenor’s hypothesis (see paragraph 134 of Annex 1 to the Reply to the SSO – CRA comments) that “*presumably had the test including voice services altered the finding, the Commission would have reconsidered whether there was any basis for proceeding against Slovak Telekom*”.

<sup>931</sup> *Slovak Telekom Decision*, paragraph 832; emphasis added by the Authority.

<sup>932</sup> I.e. the traditional analogue connection and the digital narrowband connection (integrated services digital network or ISDN); see paragraphs 26 and 75 of the *Deutsche Telekom Decision*.

and (ii) broadband services (i.e. ADSL).<sup>933</sup> These two relevant retail *access* markets were distinct from markets involving the retail *services* provided to end users over Deutsche Telekom's fixed network as accessed, such as telephone call services for example.<sup>934</sup> At the upstream level, the Commission defined one single relevant market, i.e. wholesale local access to the local loop (so-called fully unbundled local loop).<sup>935</sup>

708. There was a single (regulated) wholesale tariff for all varieties of the upstream input (analogue connection, ISDN and ADSL).<sup>936</sup> This single wholesale tariff had to be compared with three retail local access services (analogue access, ISDN and ADSL), which belonged to two distinct relevant retail access markets, i.e. narrowband access (analogue and ISDN) and broadband access (ADSL).
709. In the absence of a differentiated wholesale tariff (where a different wholesale tariff corresponds to each retail access service), the Commission decided to calculate an average price for all retail access services<sup>937</sup> by weighing the individual services on the basis of the number of end users subscribed to each variant of the retail access (i.e. analogue, ISDN and ADSL).<sup>938</sup>
710. The Authority notes that the Commission thus only included retail *access* revenues in the margin squeeze calculation. Although the wholesale input could be used to provide not only a variety of retail *access* services (i.e. analogue, ISDN or ADSL, paid for by the end user's monthly subscription), but also *complementary services* such as calls, the Commission excluded revenues from call traffic.<sup>939</sup> Such revenues belonged to a separate retail market, which was distinct from the two relevant retail markets (see paragraph 707 above).
711. Deutsche Telekom argued<sup>940</sup> that, from the point of view of the end user, *access* to the local network at the downstream level and the *calls* carried on that network formed a single bundle of products.<sup>941</sup> It added that for competitors, i.e. Deutsche Telekom's

<sup>933</sup> I.e. asymmetrical digital subscriber line or ADSL, which is a broadband connection allowing broadband services such as faster internet access. Deutsche Telekom provided this access by upgrading an existing analogue or ISDN connection: see paragraphs 26 and 78 of the *Deutsche Telekom* Decision.

<sup>934</sup> See paragraph 59 of the *Deutsche Telekom* Decision.

<sup>935</sup> The "local loop" or "last mile", which usually takes the form of a twisted pair of copper wires, is the physical circuit connecting the network termination point at the subscriber's premises to the main distribution frame or equivalent facility in the fixed public telephone network; see Article 2(e) of the Access Directive.

<sup>936</sup> It was therefore not necessary to calculate a weighted average wholesale price. See paragraph 137 of the *Deutsche Telekom* Decision.

<sup>937</sup> That is, analogue, ISDN (i.e. narrowband) and ADSL (i.e. broadband) connections; see paragraph 111 of the *Deutsche Telekom* Decision.

<sup>938</sup> See paragraph 111 of the *Deutsche Telekom* Decision.

<sup>939</sup> These revenues were based on the downstream price paid by Deutsche Telekom's end users for their subscription to the fixed telephone network. See paragraph 126 of the *Deutsche Telekom* Decision.

<sup>940</sup> *Deutsche Telekom* Decision, paragraph 117.

<sup>941</sup> It is indeed hard to imagine that an end user would pay a monthly subscription fee for access to the fixed telecom network without the intention to use this access to make phone calls or access the internet.

wholesale customers, *access* to the local loop was merely a prerequisite for the provision of complementary fixed telecommunications *services*. Deutsche Telekom argued that, consequently, revenues from those telecommunications services and especially from telephone calls should be included in the calculation of Deutsche Telekom's retail revenues.

712. The Commission, however, rejected that argument and concluded that revenues from telephone calls on the fixed line concerned should not be included in the calculation of the margin squeeze.<sup>942</sup>
713. The Commission only included *access* revenues for two reasons.<sup>943</sup>
714. The Commission noted, first, that a separate consideration of *access* charges and *call* charges was required by the secondary EU legislation on tariff rebalancing. According to this legislation, for the purposes of cost-oriented pricing, access to local network lines and the offer of different categories of calls<sup>944</sup> had to be considered separately. Consequently, the wholesale cost of access to the local loop had to be entirely recovered at the retail level by the subscription charge for *access* to the fixed line (without taking into account the services provided on that line).
715. Second, the Commission invoked economic considerations. It noted that, on economic grounds, the margin squeeze test should only include Deutsche Telekom's revenues from access charges and should exclude revenues from call traffic. It observed that the margin squeeze test seeks to compare charges for two particular services at different commercial levels and that a comparison between access charges at the wholesale and retail levels would be distorted if revenues from call traffic were included. This is because call services, which were additional to access services, could not also be included in the calculation on the wholesale side (the wholesale charge only related to access, there was no wholesale charge which related to services such as call services supplied to the end user).<sup>945</sup> The Commission considered that the method for determining whether there is a margin squeeze should be based on the principle that the established operator's tariff structure must enable competitors to compete with that operator effectively. It should at least enable competitors to replicate the established operator's customer pattern on the relevant retail market. The Commission considered that the primary consideration was the effect on market entry by competitors and not the question of whether end users regarded access and call services as a single bundle of products. It considered that Deutsche Telekom could not invoke a calculation offsetting access and call charges

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<sup>942</sup> *Deutsche Telekom* Decision, paragraphs 117 and 119.

<sup>943</sup> *Deutsche Telekom* Decision, paragraphs 119–127.

<sup>944</sup> I.e. local calls, international calls, etc.

<sup>945</sup> This was due to the fact that, if a wholesale customer opted for full local loop unbundling, the end user's line became the exclusive property of the wholesale customer and no other electronic communications provider could make use of it. Wholesale customers paid a single access charge at wholesale level to Deutsche Telekom independently of the retail services (for example calls) offered to the end user concerned and independently of the traffic volume (for example call traffic) generated by the end user. Therefore, there was no wholesale price which related to the retail services (for example calls) offered on the end user's line in question. The wholesale customer paid no additional wholesale charge related to this.

against one another in order to challenge the admissibility of the comparison method.<sup>946</sup> It added that it could not be assumed that all competitors had the same revenue structure as the established operator and thus the same scope for offsetting one source of revenue against another.<sup>947</sup>

716. Both the GCEU and the CJEU upheld the Commission's approach in the *Deutsche Telekom* case.
717. In particular, the GCEU noted that “*while it is true that, from the point of view of the end-user, access services and call services constitute a whole, the fact remains that, as far as [Deutsche Telekom's] competitors are concerned, the provision of call services to end-users via [Deutsche Telekom's] fixed network requires access to the local loop*”.<sup>948</sup> The GCEU then referred to the “*equality of opportunity*” between the incumbent operator and network owner and its competitors, which requires that prices for access services must be set at a level which places competitors on an equal footing with the incumbent operator as regards the provision of call services.
718. According to the GCEU, “[e]quality of opportunity is secured only if the incumbent operator sets its retail prices at a level which enables competitors – presumed to be just as efficient as the incumbent operator – to reflect all the wholesale costs in their retail prices”.<sup>949</sup> The GCEU added that “*even if, as [Deutsche Telekom] claims, it were true that access services and telephone calls constitute a ‘cluster’ as far as the end-user is concerned, the Commission was entitled to conclude [...] that, in order to assess whether the applicant's pricing practices distort competition, it was necessary to consider the existence of a margin squeeze in relation to access services alone, and thus without including telephone call charges in its calculation*”.<sup>950</sup>
719. The CJEU upheld these findings and recalled that “*those other telecommunications services [i.e. call services] fall within markets that are distinct from the latter market [i.e. access services]*”.<sup>951</sup> Upholding the ruling of the GCEU, the CJEU therefore confirmed that the Commission was entitled to exclude revenues from call services.
720. Thus, as upheld by the GCEU and CJEU, the Commission was correct in including access services and excluding call services. While the Commission aggregated retail access for narrowband and broadband services, this was, as explained in paragraphs 740–747

<sup>946</sup> Telenor's argument (Reply to the SSO, paragraphs 192 and 197) that the Commission's decision to exclude call revenues was mainly based on regulatory considerations must therefore be rejected. The Commission clearly also excluded call revenues for economic considerations.

<sup>947</sup> *Deutsche Telekom* Decision, paragraphs 126–128.

<sup>948</sup> Judgment of 10 April 2008, *Deutsche Telekom*, T-271/03, EU:T:2008:101, paragraph 199.

<sup>949</sup> Judgment of 10 April 2008, *Deutsche Telekom*, T-271/03, EU:T:2008:101, paragraph 199.

<sup>950</sup> Judgment of 10 April 2008, *Deutsche Telekom*, T-271/03, EU:T:2008:101, paragraph 200.

<sup>951</sup> Judgment of 14 October 2010, *Deutsche Telekom*, C-280/08 P, EU:C:2010:603, paragraph 236.

below, due to the specific technical circumstances of the *Deutsche Telekom* case. Such circumstances are not present in this case.<sup>952</sup>

721. Accordingly, the *Deutsche Telekom* case supports the Authority's view that the appropriate product aggregation level at the downstream level for conducting a margin squeeze test is at the level of the relevant product market, if that is technically feasible (see paragraphs 740–747 below in this respect).

#### 10.3.5.4 Conclusion

722. For the above reasons, the Authority considers that the appropriate level of product aggregation should be the relevant retail market, comprising Telenor's entire product portfolio on that market during the Period under Consideration, i.e. including all of Telenor's tariff plans for stand-alone MBB services provided to residential customers.

723. Therefore, contrary to what Telenor claims,<sup>953</sup> the margin squeeze test should not include retail services/products belonging to separate relevant retail markets, such as business MBB, mobile voice and MTDS.

724. In addition, the Authority considers that there are no reasons why the margin squeeze test should be applied at a more detailed level, e.g. per tariff plan.

725. The aggregated approach is consistent with the principle that the existence of anti-competitive effects should be tested at the level of the relevant market.

726. The Authority's approach, to aggregate at the level of the relevant market, finds further support in the views of the following experts in competition law and sector-specific regulation.

727. According to A.R. Pisarkiewicz, “[r]emembering that the objective of a price squeeze test is to avoid the exclusion of EECs [equally efficient competitors] from the market, the level of aggregation should correspond to a relevant market as defined in accordance with competition law principles”. Pisarkiewicz adds that this “means that ideally, the imputation test should be applied at a level of aggregation that is identical to the relevant downstream market” and that this “would also be compatible with the principle, which requires anticompetitive effects to be examined at the level of the relevant market”. Pisarkiewicz further considers that “[t]he level of aggregation must also be compatible with the applied imputation test standard. Since under competition law the existence of a margin squeeze is examined on the basis of the EEC test, aggregation should take place at a level, which covers all services supplied by the incumbent in the relevant market”.<sup>954</sup>

<sup>952</sup> As noted in paragraphs 741–744 below, at the time of the Commission's investigation, it was not technically possible to subdivide wholesale local access into narrowband and broadband services.

<sup>953</sup> See Reply to the SO, Section 5.2 and in particular paragraphs 377 and 382.

<sup>954</sup> Anna Renata Pisarkiewicz, *Margin Squeeze in the Electronic Communications Sector, Critical Analysis of the Decisional Practice and Case Law*, Wolters Kluwer 2018; see Section 4.4. *The Choice of the Relevant Downstream products/Services and the Level of Aggregation When testing the Replicability of the Dominant's Firm's Offer*, page 134; emphasis added by the Authority.

728. According to J. Bouckaert and F. Verboven, “[t]he aggregation level at which a predatory price squeeze test should be carried out must be sufficiently high so that the services constitute a relevant antitrust market”.<sup>955</sup>
729. Thus, conducting the margin squeeze test at a level of aggregation consistent with the relevant product market is in line with standard competition law analysis and principles. As the test serves to assess potential foreclosure of competitors, it is consistent with competition law principles to conduct it at the level of the relevant retail market.

### 10.3.5.5 Consideration of Telenor’s arguments on the aggregation level

#### 10.3.5.5.1 Introduction

730. According to Telenor, the margin squeeze test should include all retail services that can be offered on the basis of the upstream input concerned. It should therefore include all types of mobile communications services, including voice and data services (MBB and MTDS), offered to business and residential customers.<sup>956</sup>
731. Telenor invokes three main reasons for this:
- (a) The relevant retail product market is broader than the one defined by the Authority;
  - (b) Even if the relevant retail product market were to be narrowly defined, Commission practice and EU case law support a broader aggregation level (comprising all products that can be supplied downstream using the upstream input at issue);
  - (c) The Authority’s approach is inconsistent with the ‘arena of competition’.

732. The Authority disagrees with Telenor for the reasons set out below.

#### 10.3.5.5.2 The relevant retail market

733. According to Telenor, even assuming that the appropriate level of product aggregation is the same as the relevant retail product market, the latter should in any event be broader than stand-alone MBB services offered to residential customers. It should, according to Telenor, include at least stand-alone MBB and ordinary mobile communications services (voice, SMS/MMS and MTDS) sold to business and residential customers.
734. The Authority disagrees. It refers to Section 8.4 above, where, after reviewing Telenor’s arguments, it concluded that the relevant product market at the downstream level is the supply of stand-alone MBB services to residential customers in Norway.

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<sup>955</sup> Jan Bouckaert and Frank Verboven, *Price Squeezes in a Regulatory Environment* (published in the Journal of Regulatory Economics, 26:3, 321–351, 2004); emphasis added by the Authority.

<sup>956</sup> See Section 5.2 of the Reply to the SO and Section 3.2 of Annex 13 to the Reply to the SO; see also Section 6.2 of the Reply to the SSO and Section 5.1 of Annex 1 to the Reply to the SSO – CRA Comments. Telenor also contends that even a finding of negative margins, at whatever level of aggregation, does not amount to an abuse if there are no exclusionary effects. Anti-competitive effects will be considered in Section 10.5 below.

10.3.5.5.3 *Commission practice and EU case law on aggregation level*

735. Telenor further contends that, even if the relevant retail product market were to be narrowly defined, Commission practice and EU case law support a broader aggregation level. According to Telenor, both the *Deutsche Telekom* and *Telefónica* decisions show that the correct approach is to aggregate across the entire range of retail products that can be supplied at the downstream level using the upstream input at issue, even if these products belong to separate downstream markets.<sup>957</sup> Telenor also refers to the *Slovak Telekom* Decision.<sup>958</sup>
736. The Authority acknowledges that the relevant wholesale input<sup>959</sup> in the present case can be used to provide several downstream services, such as MBB services, as well as mobile voice, SMS, MMS and MTDS to residential and business customers.
737. It disagrees, however, with Telenor that the definition of the relevant market is secondary to and independent of the issue of the appropriate level of product aggregation.<sup>960</sup> As set out in Sections 10.3.5.2–10.3.5.4 above, the definition of the relevant market is rather the starting point, which determines the broadest aggregation level at which the margin squeeze test should be done.
738. In addition, the *Telefónica*, *Slovak Telekom* and *Deutsche Telekom* decisions do not support Telenor’s argument that the aggregation level should be broader than the relevant market and should include all retail products that can be supplied at the downstream level using the upstream input at issue.
739. In *Telefónica*, the Commission only included services belonging to the relevant market in its margin squeeze test, based on an aggregated approach. It adopted the same approach in *Slovak Telekom*.<sup>961</sup>
740. The Authority acknowledges that, in the *Deutsche Telekom* case, the Commission included both narrowband retail access (analogue and ISDN) and broadband retail access (ADSL) in its margin squeeze test, although they belonged to separate relevant retail markets.
741. As explained below, this was however due to the specific technical characteristics of the wholesale input concerned in *Deutsche Telekom*, i.e. full local loop unbundling. Subject to this, the Commission excluded services (such as call services) belonging to other relevant markets, even though such services could be supplied at the downstream level using the same upstream input at issue (see paragraphs 710-720 above).

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<sup>957</sup> Reply to the SO, Section 5.2.2; Reply to the SSO, Section 6.2; and Section 5.1 of Annex 1 to the Reply to the SSO – CRA Comments.

<sup>958</sup> See Reply to the SSO, Section 6.2.5.

<sup>959</sup> I.e. access and origination services on public mobile telephone networks.

<sup>960</sup> Reply to the SO, paragraphs 381 and 384.

<sup>961</sup> See paragraph 706 above.

742. The specific technical characteristics at issue in *Deutsche Telekom* were as follows. Until the end of 2001, when Deutsche Telekom introduced line sharing, which allowed two electronic communications providers to separately provide retail narrowband and broadband access services over the same copper pairs<sup>962</sup> to the same retail customer simultaneously, full local loop unbundling<sup>963</sup> was the only wholesale local access service offered by Deutsche Telekom. This wholesale local access service could, during the relevant period, not be further subdivided into narrowband and broadband services. This was recognised by the Commission in its decision<sup>964</sup> and by the GCEU, which indicated that “*ADSL cannot be offered to end-users on its own because, for technical reasons, it always involves an upgrading of analogue or ISDN narrowband connections*”.<sup>965</sup>
743. Indeed, to provide broadband, xDSL equipment had to be added to the single copper line; otherwise it remained narrowband and could only be used for telephone services and narrowband (dial up) internet access, and not for broadband (FBB) services. Therefore, prior to the introduction by Deutsche Telekom of line sharing at the end of 2001, there were no technical means to provide broadband and narrowband separately over the single copper line.<sup>966</sup> In other words, only one electronic communications provider at a time could provide narrowband and broadband services to an end user.
744. The Authority considers that these technical limitations on the supply of wholesale local access at the time explain the approach followed by the Commission when estimating the retail access prices used to assess the margin squeeze. In other words, despite wholesale narrowband and broadband access being two separate services (each of which involved different wholesale costs), technical limitations meant that it was only feasible to offer them jointly at wholesale level until the end of 2001 in Germany. The wholesale price thus reflected a combination of the costs of providing each wholesale service separately,<sup>967</sup> and the Commission similarly had to take a weighted average of the prices charged for retail narrowband and broadband access services by Deutsche Telekom. The Commission further had to take into account that these technical limitations also meant

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<sup>962</sup> A twisted copper pair comprises two separate insulated copper wires, which are twisted together (to reduce crosstalk) and run in parallel. Multiple twisted copper pairs may be encased in a single copper line/cable.

<sup>963</sup> As set out in footnote 945 above, in the case of full local loop unbundling, the end user's line becomes the exclusive property of the wholesale customer and only the latter can make use of the line to offer retail electronic communications services.

<sup>964</sup> *Deutsche Telekom* Decision, paragraph 67: “*the wholesale local access market cannot at present be further subdivided into narrowband and broadband services. Until recently DT granted local network access only for the entire bandwidth spectrum, so that competitors at the wholesale level had to rent all bandwidths in the local loop [...] A division between bandwidths has been possible only since DT at the end of 2001 concluded an agreement with a competitor, QSC AG, providing for line sharing*”. See also paragraph 26 of the Decision.

<sup>965</sup> Judgment of 10 April 2008, *Deutsche Telekom*, T-271/03, EU:T:2008:101, paragraph 148.

<sup>966</sup> After the introduction of line sharing at the end of 2001, it became technically possible to split the single copper line in such a way that telephone and broadband access services could be purchased separately at wholesale level. Thus, one provider – typically the incumbent – could provide retail narrowband services, while the alternative provider could provide retail broadband services on the same copper pair.

<sup>967</sup> In setting the monthly charge for local loop rental, the German regulatory authority had applied a single wholesale tariff, irrespective of the downstream service the competitor provided over the line; see *Deutsche Telekom* Decision, paragraph 113.

that, until the end of 2001, wholesale customers could only unbundle the local loop in full. This meant that when one communications provider took over the line connecting to the end user, it was not possible for any other electronic communications provider to supply retail narrowband or broadband access services to that end user; it thus eliminated further access to the subscriber's line for the supply of both retail narrowband and broadband access services. In these circumstances, in order to assess whether an equally efficient operator had been effectively foreclosed from competing with Deutsche Telekom due to the latter's wholesale and retail prices, the Commission calculated the weights of each retail access price by reference to the share of retail customers that purchased retail narrowband and broadband access services from Deutsche Telekom.<sup>968</sup>

745. In the Authority's view, the above explains why it would not have been appropriate for the Commission to test the single wholesale local access price charged by Deutsche Telekom against each of the prices it charged for narrowband and broadband retail access separately.
746. The technical limitations in the *Deutsche Telekom* case are not present in the conditions of supply in the residential stand-alone MBB market in Norway during the Period under Consideration. There was no technical impediment to the separate provision or separate pricing of wholesale mobile data services for either MBB or MTDS. In fact, when purchasing wholesale mobile data access from Telenor, the access seeker could provide MTDS or MBB or both.
747. In addition, whereas in *Deutsche Telekom* the leasing of the local loop by one operator meant that only that operator could provide both narrowband and broadband retail access services to the end user connected to that line, such a situation does not arise in the present case. To the contrary, the purchase of wholesale mobile access from Telenor to provide mobile data services in the retail residential stand-alone MBB market to an individual customer did not limit the ability of any other competitor(s) (including Telenor) to provide retail MTDS to that same customer.
748. In this context, the Authority sees no reason why the assessment of any margin squeeze in the present case should be done by comparing the wholesale access price for mobile data services against an artificially-calculated retail price combining the prices of both stand-alone MBB and MTDS.

#### 10.3.5.5.4 *The arena of competition*

749. Telenor further argues that the Authority's approach is inconsistent with the correct interpretation of the 'arena of competition' concept.<sup>969</sup> According to Telenor, from an economic perspective, the appropriate level of aggregation for a margin squeeze test is

<sup>968</sup> As explained in paragraphs 142–148 of the *Deutsche Telekom* Decision.

<sup>969</sup> Reply to the SO, Section 5.2.4 and Annex 13 to the Reply to the SO, Section 3.2.5. See also Annex 1 to the Reply to the SSO – CRA Comments, Section 5.1.4.

the “arena over which important entry and exit decisions are made” by market players.<sup>970</sup> It adds that the ‘arena of competition’ should not be confused with the ‘relevant market’.

750. Telenor considers that the appropriate ‘arena of competition’ corresponds to a broader aggregation level, which would include all types of mobile communications services (including voice and data services) offered to business and residential customers.
751. The Authority disagrees with Telenor for several reasons.
752. First, the Authority notes that, as Telenor recognises,<sup>971</sup> the expression ‘arena of competition’ is not used in the European Commission’s decisional practice or European case law. It is, instead, a concept coined by academic economists. Further, the view of these academics is consistent with the Authority’s approach in the present case, namely that the margin squeeze test should be conducted at the level of the relevant market, i.e. in this case, stand-alone MBB services for residential customers.<sup>972</sup>
753. Telenor notes the Commission’s statement in *Telefónica* that “*the aggregated approach is consistent with a new entrant’s internal decision making process in that it assesses the profitability of its investment in a network by considering the complete range of products that it is able to offer in the relevant downstream market*”.<sup>973</sup> According to Telenor, this reflects the idea of the arena of competition.<sup>974</sup>
754. However, as is clear from this quote, the aggregated approach is clearly linked to the “relevant downstream market”.<sup>975</sup> When applying this aggregated approach, the Commission includes in the margin squeeze test only the mix of services marketed on the relevant retail market.

<sup>970</sup> See Reply to the SO, paragraphs 385 and 402.

<sup>971</sup> Reply to the SO, paragraphs 404–405.

<sup>972</sup> Telenor’s economic consultants refer to a submission of 2001 by Prof. Martin Cave to the Dutch regulator OPTA (see paragraph 70 of Annex 13 of the Reply to the SO). In this submission, Professor Cave argues against a price squeeze test conducted at a highly disaggregated level (i.e. narrower than the relevant market). Professor Cave quotes Professor Alfred Kahn, who expresses the view that the margin squeeze test should be conducted at the level of the relevant market, including all the tariff plans of single services provided in that relevant market. Professor Cave argues in the same vein that the test “*excludes unrelated products, but includes at a minimum those services in the relevant market in the supply of which entrants demonstrably participate*”. In his opinion, “*it does not make sense to subject highly disaggregated services to a price squeeze test*”. For example, in his view it is not appropriate to conduct the margin squeeze test separately for the call set-up and the call conveyance because the two are necessarily purchased together. The Authority interprets Professor Cave’s argument as meaning that in the present case, the Authority’s margin squeeze test should take into account all services and tariff plans provided by Telenor in the relevant retail market (i.e. residential stand-alone MBB services).

<sup>973</sup> *Telefónica* Decision, paragraph 388; see also *Slovak Telekom* Decision, paragraph 832.

<sup>974</sup> Annex 1 to the Reply to the SSO – CRA Comments, paragraphs 131–132. See also Reply to the SO, paragraph 385.

<sup>975</sup> See also *Slovak Telekom* Decision, paragraph 832: “*In this case, the margin squeeze test has been conducted on the basis of an aggregated approach, that is to say on the basis of the mix of services marketed by ST on the relevant retail market.*” (emphasis added by the Authority).

755. The Authority recalls its Notice on the definition of the relevant market, which describes market definition as “*a tool to identify and define the boundaries of competition between firms*”.<sup>976</sup> In other words, the definition of the relevant market is aimed at identifying the boundaries (or as Telenor describes it ‘the arena’) of competition.
756. Contrary to what Telenor argues, the relevant retail market is also the correct ‘arena’ to assess the effects of the pricing behaviour. As the GCEU noted in its *Telefónica* judgment: “*the determination of the relevant market serves to evaluate whether the undertaking concerned is able to hinder effective competition on that market*”.<sup>977</sup> Likewise, according to A.R. Pisarkiewicz, “[r]emembering that the objective of a price squeeze test is to avoid the exclusion of EECs [equally efficient competitors] from the market, the level of aggregation should correspond to a relevant market as defined in accordance with competition law principles”. Pisarkiewicz adds that this approach is also “*compatible with the principle, which requires anticompetitive effects to be examined at the level of the relevant market*”.<sup>978</sup>
757. Second, in the Authority’s view, Telenor’s argument regarding the arena of competition is at odds with the Commission’s conclusion in the *Deutsche Telekom* case, as upheld by the EU Courts. As the Commission noted in *Deutsche Telekom*, it cannot be assumed that all competitors have the same revenue structure as the established operator and thus the same scope for offsetting one source of revenue against another.<sup>979</sup>
758. Third, during the Period under Consideration, mobile communications providers *did* offer and end users *did* buy residential MBB services on a stand-alone basis, i.e. independently from other mobile communications services. This was an economic reality during the Period under Consideration.
759. This economic reality has been confirmed by Nkom<sup>980</sup> and Telia.<sup>981</sup>
760. This can also be seen from Figure 25 of Annex 13 to Telenor’s Reply to the SO, reproduced at paragraph 331 above. This shows that, during the Period under Consideration, the proportion of Telenor’s residential MBB plans which were taken as add-ons to telephony subscriptions only reached a maximum of slightly above 12% in July 2012, while for most of the period it was significantly below 10% and in many months below 4%. This means that at least 88% of Telenor’s residential MBB customers

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<sup>976</sup> Notice on the definition of the relevant market, paragraph 2.

<sup>977</sup> Judgment of 29 March 2012, *Telefónica*, T-336/07, EU:T:2012:172, paragraph 201.

<sup>978</sup> Anna Renata Pisarkiewicz, *Margin Squeeze in the Electronic Communications Sector, Critical Analysis of the Decisional Practice and Case Law*, Wolters Kluwer 2018, Section 4.4. *The Choice of the Relevant Downstream products/Services and the Level of Aggregation When testing the Replicability of the Dominant’s Firm’s Offer* (page 134; see Document No 1137045).

<sup>979</sup> See paragraph 715 and footnote 947 above.

<sup>980</sup> In its 2010 Market Analysis (paragraph 62), Nkom noted that: “*At the retail level, access to the Internet through the mobile networks is also provided independently of voice telephony and SMS.*”

<sup>981</sup> Telia confirmed that: “*From a demand side perspective, the customers ordered voice bundle and MBB separately during the relevant time period.*” See letter from Telia to the Authority of 30 August 2016 (Document No 1075917), Section 2.2 (page 3).

took their residential MBB tariff plan on a stand-alone basis. This shows that there was clearly a separate demand for stand-alone MBB services. Competition for this distinct demand is therefore also, for this reason, a relevant ‘arena of competition’.

761. The Authority notes further that ICE entered the market by offering *only* stand-alone MBB services, due to the specific technology it used.<sup>982</sup>
762. Finally, during the Period under Consideration, MBB services had a high growth rate and were an important factor in the battle for end users.
763. As set out in paragraph 179 above, in an internal presentation of April 2008 entitled “*Mobile BB [Customer Satisfaction Index]*” regarding consumer surveys in the residential MBB market, Telenor stated that MBB was a focus area and one of the “must win battles” for Telenor in 2008.<sup>983</sup> In an internal memorandum of October 2010,<sup>984</sup> Telenor described the MBB market as displaying “significant growth” and it considered potential entry from a newcomer (Hi3G) targeting this (at the time) underdeveloped MBB market as “the main area for new establishment in Norway”.
764. Nkom noted in its 2010 Market Analysis that stand-alone MBB services were an increasingly important factor in the battle for end users during the Period under Consideration.<sup>985</sup>
765. Telenor’s competitor, Ventelo, highlighted the importance of offering stand-alone MBB services and stated that “*it was impossible not to offer MBB services when every market segment required delivery of such*” and that “*the lack of offers of MBB services would most probably have led to fewer customers, both as a result of reduced sales and increased churn, and would therefore have reduced profitability*”.<sup>986</sup>
766. According to Telenor, the statements made by Ventelo and other competitors<sup>987</sup> would suggest that they offered MBB and mobile telephony jointly because MBB was seen as a supplement to telephony services and part of a complete offer, and that supplying MBB was necessary to keep existing customers and win new ones. According to Telenor, such

<sup>982</sup> See paragraph 72 above.

<sup>983</sup> See Document No 1097593, page 2.

<sup>984</sup> See Document No 656746 – JN1 31, page 4.

<sup>985</sup> See Nkom’s 2010 Market Analysis, paragraph 62 (emphasis added by the Authority): “*At the retail level, access to the Internet through the mobile networks is also provided independently of voice telephony and SMS. Such mobile broadband subscriptions, which are usually offered at a flat rate for use, have had a high rate of growth that is expected to continue in coming years. The sale of such mobile broadband subscriptions has thus taken on increasing importance in the battle for end users.*”

<sup>986</sup> See Document No 783134: Ventelo’s reply of 16 May 2014 (non-confidential version), response to questions 3.3 and 3.5; translation by the Authority of the following quotes: “*Det var utelukket å ikke tilby MBB tjenester da alle markedssegmenter krevde leveranse av slike tjenester*”; and “*Manglende tilbud av MBB tjenester ville mest sannsynlig medført færre kunder, både som resultat av redusert salg og på grunn av økt churn, og dermed redusert lønnsomhet*” (also reported by Telenor; see paragraph 77 of Annex 13 to the Reply to the SO). The Authority recalls that “*Ventelo did consider and still considers MBB services to be a supplement to ordinary mobile services: a separate subscription which covered a special need*” (see paragraph 316 and footnote 460 above).

<sup>987</sup> See Paragraph 77 of Annex 13 to the Reply to the SO.

statements indicate that they were interested in the overall profitability of their mobile offer (i.e. across all services that they offered), as opposed to the profitability of individual services.<sup>988</sup>

767. The Authority disagrees with how Telenor interprets these competitors' statements. In the Authority's view, these statements indicate the importance of competing in the market for residential stand-alone MBB services and of capturing new customers in that growing market. This shows that residential stand-alone MBB services are the appropriate aggregation level for conducting the margin squeeze test.
768. In conclusion, the Authority does not agree with Telenor's arguments that the 'arena of competition' at which to conduct the margin squeeze test in the present case should be at a broader level of aggregation than at the level of the relevant retail market. The 'arena of competition' in the present case has been established on the basis of a rigorously defined relevant retail market, in accordance with established competition law policy and principles, as set out in Section 8.1.1 above.

#### 10.3.5.5.5 *Distinct demand and supply conditions for residential stand-alone MBB*

769. Finally and in any event, even if, as suggested by Telenor, one were to consider supply-side substitution at the market definition stage solely on the basis of the mere *technical possibility* or *ability* to switch production (which is not accepted), it would remain correct to assess the potential for anti-competitive effects at the level of the stand-alone residential MBB market. This is because, if incentives are not assessed at the market definition stage, the *actual incentives* to switch such production would in any event need to be analysed at the stage of assessing effects on competition: as has been recalled above, "*the existence of an actual competitive constraint due to supply-side substitution requires not only the ability to enter or expand in the segment in question but also the incentive to do so*".<sup>989</sup> In other words, to understand the actual or potential strength of competitive constraints, an analysis of incentives to switch supply must take place at some stage in the overall assessment, whether at the market definition stage (in line with the Authority's approach in Sections 8.4.4.3 and 8.4.6.3 above), or alternatively later in the assessment of anti-competitive effects.
770. On this point, and if, instead of at the stage of market definition, the assessment of incentives takes place in the context of the assessment of anti-competitive effects, the Authority has shown in Sections 8.4.3.2, 8.4.4.2 and 8.4.6.2 and in paragraphs 758-765 above that there was a distinct demand for MBB services in the residential market during the Period under Consideration. Telenor itself described this growth product as a "must-win battle",<sup>990</sup> displaying "significant growth", and as "the main area for new establishment in Norway".<sup>991</sup>

<sup>988</sup> Paragraph 78 of Annex 13 to the Reply to the SO and paragraph 139 of Annex 1 to the Reply to the SSO – CRA Comments.

<sup>989</sup> See paragraph 143 of the Commission's Decision of 12 December 2012 in Case COMP/M.6497 – *Hutchison 3G Austria/Orange Austria* (see footnote 499 above) and paragraphs 355–365 above.

<sup>990</sup> See paragraph 179 above.

<sup>991</sup> See footnote 237 above.

771. The Authority has shown further (see paragraphs 370–373 above, Section 10.4 below and Annex 2 to this Decision) that suppliers of MTDS that did not have a nationwide mobile network and had to rely on the relevant wholesale input of either Telenor or Telia, i.e. NROs, MVNOs and SPs (non-MNOs), lacked economic incentives to supply, or to expand their supply of, residential stand-alone MBB services during the Period under Consideration. This was because the wholesale terms offered by Telenor and Telia for the supply of the wholesale input, in combination with their retail prices for residential stand-alone MBB services, led to negative gross margins for their wholesale customers (NROs, MVNOs and SPs) during the entire Period under Consideration, or the major part of it. Given this lack of commercial incentive to actively supply residential stand-alone MBB, actual and potential competitive constraints from such NROs, MVNOs and SPs were clearly deficient during the Period under Consideration.
772. This lack of competitive constraints from non-MNOs in the provision of an important growth product suggests a sufficiently distinct set of competitive dynamics and risk of consumer harm such that it represents the correct level of aggregation for assessing potential anti-competitive effects. This is confirmed further by the fact that the supply side was highly concentrated, with between 76% and 85% of residential stand-alone MBB subscribers in the hands of the only two nationwide MNOs in Norway during the entire Period under Consideration.<sup>992</sup> In such conditions, the incentives of non-MNOs (or the lack thereof) assume an even greater potential competitive significance.<sup>993</sup>
773. As shown in paragraphs 890 and 891 below, non-MNOs can offer an important source of competitive discipline. In the presence of economic incentives to supply, they can contribute direct competitive pressure on both price and non-price service features, bringing service and price innovations through their own retail offerings. Moreover, non-MNOs present an opportunity for MNOs to enhance their network utilisation and thus to help them achieve benefits of scale.<sup>994</sup> In the absence of a fully-established third nationwide mobile network, and in the presence of such high concentration levels in the supply of residential stand-alone MBB in Norway, non-MNOs may (absent negative margins) have contributed important competitive pressure on price and non-price service features during the Period under Consideration. Furthermore, taking a dynamic perspective, such retail traffic generated by non-MNOs may in turn contribute valuable (wholesale) traffic to a third nationwide mobile network in the future, thereby also potentially supporting sustainable competition over time.
774. In short, irrespective of whether the economic incentives to switch production to residential stand-alone MBB are considered at the stage of market definition, or

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<sup>992</sup> See Table 10 at paragraph 645 above.

<sup>993</sup> See Section 9.3 above where it is shown Telenor had a high degree of market power in the supply of residential stand-alone MBB during the Period under Consideration. It described the market as a duopoly between itself and Telia. See also paragraphs 890 and 891 below for a fuller description of the potential competitive role of non-MNOs.

<sup>994</sup> See Commission Decision of 28 May 2014 in Case No COMP/M.6992 *Hutchison 3G UK / Telefonica Ireland*, paragraph 120. See also footnote 1121 below for further details of European's Commission's assessment of the competitive role played by access seekers in the UK market.

alternatively at the stage of assessing anti-competitive effects, they must be considered at some point in the overall assessment. On any view, therefore, it remains entirely correct to assess the potential for anti-competitive effects at the level of aggregation of stand-alone MBB services offered to residential customers during the Period under Consideration.

#### 10.3.5.6 Conclusion

775. On the basis of the above, the margin squeeze test is conducted taking into consideration *all* the tariff plans for stand-alone MBB services sold by Telenor to residential customers in Norway during the Period under Consideration. *Only* those plans will be included.

### 10.4 The margin squeeze assessment

#### 10.4.1 Introduction

776. In this section, the Authority shows that Telenor abused its dominant position by way of margin squeeze practices between the wholesale prices for access and origination services on public mobile telephone networks and the retail prices for the provision of stand-alone MBB services to residential customers in Norway during the entire Period under Consideration – based on the wholesale tariffs charged by Telenor to SPs – and during a major part of the Period under Consideration – based on the wholesale NRO tariffs charged by Telenor to NwN and the wholesale MVNO tariffs charged by Telenor to Ventelo. The Authority recalls, as set out in the SSO,<sup>995</sup> that it no longer finds a margin squeeze infringement in relation to the spread between the wholesale MVNO tariffs charged to TDC and Telenor's retail prices for residential stand-alone MBB services.

777. In line with the EEC test, described in Section 10.3.2 above, the Authority has considered, at the downstream level, Telenor's own incremental revenues and costs<sup>996</sup> and Telenor's retail customers' usage patterns (i.e. Telenor's residential end users' consumption of stand-alone MBB data). At the upstream level, the Authority has considered the prices charged by Telenor to its wholesale customers at the NRO, MVNO and SP levels for wholesale access to its mobile network.

778. The Authority notes that, in line with the EEC test, the margins that are presented in this section are not the actual margins earned by Telenor's wholesale customers during the Period under Consideration. The margins reflect what Telenor would have earned if it were charged its own wholesale prices during the same period.

779. In the case at hand, the first step of the Authority's analysis is to calculate the gross margins, by comparing: (i) Telenor's revenues for stand-alone MBB services sold to its residential customers at the downstream level; and (ii) Telenor's wholesale prices

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<sup>995</sup> See paragraph 151 of the SSO.

<sup>996</sup> As explained in Section 10.4.4, the Authority has not considered it necessary to conduct a detailed analysis of Telenor's costs at the downstream level in this case, because the negative gross margins (see Section 10.4.3) would only become larger (that is, more negative) if Telenor's downstream costs were taken into account.

charged to its wholesale customers during the Period under Consideration for wholesale access to its mobile network in order to supply stand-alone MBB services.

780. This comparison may yield two outcomes.
781. The comparison may result in *negative gross margins*, i.e. Telenor's wholesale charges for the wholesale input were higher than Telenor's retail revenues earned at the downstream level. In this scenario, Telenor's competitors – even if they were as efficient as Telenor – would be compelled to sell at a loss if they attempted to replicate Telenor's product portfolio on the relevant retail market. In such a scenario, at least potentially exclusionary effects on competition are probable.<sup>997</sup>
782. Alternatively, the comparison may result in *positive gross margins*, i.e. Telenor's wholesale charges for access to the wholesale input were lower than Telenor's revenues earned at the downstream level. In such a case, a further, second step in the analysis would be required in order to determine whether those gross margins would have been sufficient to cover Telenor's product-specific costs (as measured by LRAIC) at the downstream level.
783. On the facts of this case, the Authority has found that Telenor's gross margins were negative during the entire Period under Consideration – based on the wholesale tariffs charged by Telenor to SPs – and during a major part of the Period under Consideration – based on the wholesale NRO tariffs charged by Telenor to NwN and the wholesale MVNO tariffs charged by Telenor to Ventelo (see Section 10.4.3 below). In the Authority's view, this finding in itself shows that Telenor has engaged in margin squeeze practices which were at least potentially capable of excluding competitors. It is thus not necessary for the Authority to carry out further analysis to determine whether Telenor's margins covered its downstream costs. For the sake of completeness, however, the Authority briefly discusses such costs in Section 10.4.4 below.
784. For its margin squeeze assessment, the Authority assembled a spreadsheet model which used data provided by Telenor as inputs. The Authority's model was made available to Telenor, together with an Appendix which explained its main components and calculations.<sup>998</sup> The model also allows the user to carry out a number of sensitivity checks to test the robustness of the Authority's results, some of which are referred to in the following sections.

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<sup>997</sup> See, for example, judgment of 17 February 2011, *TeliaSonera Sverige*, C-52/09, EU:C:2011:83, paragraph 73.

<sup>998</sup> See Document No 770397 (Excel workbook "Margin Squeeze Model Residential MBB") and Document No 769419 (Appendix A to the SO, which explains the model), for the original spreadsheet model annexed to the SO. See also Document No 1068848 (Excel spreadsheet, annexed to the SSO), which updated Document No 770397 and contains the Authority's final calculations presented in this section (see Annex I to this Decision for a summary of the result of these calculations).

#### 10.4.2 *Telenor's downstream revenues and upstream charges*

##### 10.4.2.1 *Data revisions*

785. In its Reply to the SO,<sup>999</sup> Telenor provided the Authority with revised data for the calculation of the margins. In brief, the revisions submitted by Telenor consisted of:

- (a) revised raw data (in particular, in respect of: traffic volumes for residential stand-alone MBB plans; fixed revenues and connection fees; and upstream fixed fees for Ventelo);
- (b) the exclusion of MBB plans originally included in the calculations presented in the SO, which were subsequently found not to be stand-alone MBB plans;
- (c) the aggregation of data relating to different variants of the same MBB plan (which were treated as separate variants in the calculations presented in the SO);
- (d) the use of actual splits for MBB plans which were sold to both residential and business customers ("mixed" plans) for the entire Period under Consideration;<sup>1000</sup> and
- (e) a more accurate split of connection, lock-in and termination fees between residential and business customers.

786. Although these revisions only have a negligible impact on the margin calculations in this Decision, the Authority has used the revised data provided by Telenor in its Reply to the SO.<sup>1001</sup>

##### 10.4.2.2 *Telenor's downstream revenues*

787. For its margin squeeze test, the Authority has included the following Telenor revenues – expressed as Average Revenue per User ("ARPU"), in NOK/month/user – from providing residential stand-alone MBB services to end users at the downstream level:

- (a) The monthly fees paid by Telenor's subscribers, which comprised a fixed fee and/or a variable fee linked to the amount of mobile data consumed;<sup>1002</sup>

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<sup>999</sup> See, in particular, Annex 13 of the Reply to the SO, Section 4.2.

<sup>1000</sup> In the SO, the Authority used actual splits until September 2009 and used estimates from October 2009 onwards.

<sup>1001</sup> The Authority communicated to Telenor in the SSO that it intended to use these revised data; see, in particular, Section 2.5.2.1 of the SSO. The final model used by the Authority to test Telenor's margins (Document No 1068848) incorporates such revised data, with sensitivities G and H being set to 1 and 2, respectively, and sensitivity F set to 1.

<sup>1002</sup> Document No 692571, reply by Telenor of 6 December 2013 to the Authority's request for information of 16 October 2013, page 29. As described by Telenor, the revenues reported in its accounts reflect permanent discounts on list prices as well as specific campaigns where no, or a reduced, fixed fee might be charged to customers during a specific period. The consumption of mobile data by end users at the downstream level was calculated on the basis of Telenor's residential MBB customers' data usage patterns, in line with the EEC test, which aims at replicating Telenor's offer in the downstream market.

- (b) Device and miscellaneous revenues (and the corresponding costs) that are incremental to the supply of residential stand-alone MBB services; and
  - (c) Connection, lock-in and termination fees.<sup>1003</sup>
788. On the other hand, notwithstanding Telenor's objections,<sup>1004</sup> the Authority has excluded international roaming revenues (and the corresponding costs) from the margin calculation.<sup>1005</sup> This is because international roaming belongs to a separate relevant market.<sup>1006</sup> Moreover, international roaming can be purchased independently of wholesale access and origination services on mobile networks and can be purchased from third parties other than Telenor.
789. Lastly, as far as the choice of which MBB products to include in the test is concerned, the Authority has included Telenor's entire portfolio of stand-alone MBB products offered to residential customers during the Period under Consideration, including Telenor's large number of "legacy customers" (i.e. customers which remained on MBB product plans that were no longer offered on the market ("inactive" products)).<sup>1007</sup>
790. The Authority notes that the average revenue from these legacy customers was generally higher than the amount earned from products open to new subscriptions at a given point in time (i.e. "live" or "active" products). As a result, any as-efficient operator considering entry into the residential stand-alone MBB market would have faced a more difficult competitive environment than Telenor, because, at all times, it would have had to compete against Telenor's portfolio of live products without the benefit of higher revenues from legacy customers.

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<sup>1003</sup> In the spreadsheet model annexed to the SO (Document No 770397), the Authority had excluded from the calculations both device and miscellaneous revenues and connection, lock-in and termination fees. Telenor argued against this choice in its Reply to the SO (see, in particular, Annex 13 of the Reply to the SO, Section 3.3). Including these two additional revenue streams for the purposes of the margin calculation is to Telenor's advantage, although the impact on the resulting margins is small. On balance, the Authority has adopted a conservative approach and has included them in its final calculations; see Document No 1068848, where Telenor's approach is implemented by setting sensitivities F, M2 and N2 to 1.

<sup>1004</sup> See Section 3.3 of Annex 13 of the Reply to the SO.

<sup>1005</sup> See Document No 1068848, where sensitivities M1 and N1 are set to 0.

<sup>1006</sup> See the Authority's 2004 Recommendation on relevant markets, which identified the wholesale national market for international roaming on public mobile networks (i.e. Market 17) as a separate relevant market. Nkom also shared the view that international roaming was a separate market at the wholesale level (see Nkom's 2006 Market Analysis, Section 2.3.9; see also Nkom's Analysis of the Wholesale National Market for International Roaming on Public Mobile Networks, 31 July 2006:

<<https://www.eftasurv.int/cms/sites/default/files/documents/gopro/443-385509.PDF>>, accessed June 2020).

Further, while international roaming (Market 17) was removed from the Authority's 2008 Recommendation on relevant markets, it is still subject to a distinct regulatory regime, implemented by way of the EU Roaming Regulations, which (having been incorporated into the EEA Agreement) have regulated roaming charges in the EEA EFTA States since the end of 2007. Further details of the EEA regulatory framework for international roaming may be found here: <<https://www.nkom.no/ekom-markedet/plikter-og-regelverk/internasjonal-gjesting-roaming>>, accessed June 2020.

<sup>1007</sup> The Authority has calculated a weighted average of Telenor's revenues on the basis of the number of subscribers to each residential stand-alone MBB product relative to the total number of subscribers to all residential stand-alone MBB products of Telenor.

791. By including legacy customers, the Authority has therefore taken a conservative approach (i.e. that is favourable to Telenor) because, without legacy customers, Telenor's revenues (and margins) would generally have been lower compared to those calculated when including such customers.

#### 10.4.2.3 *Telenor's upstream charges*

##### 10.4.2.3.1 *Telenor's wholesale contracts and pricing structure and level*

792. As set out in paragraph 659 above, a margin squeeze exists if the spread between the wholesale price charged to competitors and the retail price charged to the dominant undertaking's own retail customers is negative or insufficient to cover the costs the dominant undertaking has to incur in order to supply the retail service concerned. The Authority has thus identified the wholesale prices that Telenor charged to its competitors during the Period under Consideration.

793. At the upstream level, both the pricing structure and pricing level that Telenor used for its wholesale customers changed several times during the Period under Consideration. Contracts with wholesale customers were negotiated individually, which meant that Telenor had different terms for each customer. As a result, the Authority has calculated Telenor's upstream charges at the NRO level (i.e. for NwN<sup>1008</sup>) and MVNO level (i.e. for Ventelo<sup>1009</sup>) separately. For the SP level, the Authority has instead used a weighted average of the wholesale terms offered by Telenor, resulting in one combined margin squeeze assessment.<sup>1010</sup> This is because SP customers had similar wholesale terms<sup>1011</sup> and would all have had negative margins individually.

<sup>1008</sup> See the following wholesale contract and its subsequent changes: NR Agreement between Telenor and NwN of 03/04/2008 (Document No 657260 - EES 27); Change order 2008-01 of 21/10/2008 (Document No 657260 - EES 24); Additional agreement of 02/09/2009 to the NRA agreement with NwN (Document No 657260 - EES 30); Change order 2009-01 of 10/02/2010 – applicable from 01/07/2009 (Document No 657260 - EES 31); Additional agreement 2 of 18/08/2010 to the NRA agreement with NwN (Document No 657260 - EES 28); Change order 2010-01 of 01/09/2010 applicable from 01/06/2010 (Document No 657260 - EES 32).

<sup>1009</sup> See the following wholesale contract and its subsequent changes: MVNO Agreement between Telenor and Ventelo of 20/10/2005 (Document No 657260 - EES 39); Change order 2009-01 of 10/11/2009 - applicable from 01/02/2009 (Document No 657260 - EES 37); Change order 2009-02 of 12/08/2009 - applicable from 01/07/2009 (the change order as such is applicable from 01/02/2009, however the changes relating to prices are applicable from 01/07/2009) (Document No 657260 - EES 36); Change order 2010-01 of 20/01/2010 (Document No 657260 - EES 42); Additional agreement of 12/11/2010 to the MVNO Agreement between Telenor and Ventelo (Document No 657260 - EES 44); Additional agreement of 01/06/2011 to the Additional agreement of 12/11/2010 (Document No 657260 - EES 40); Additional agreement 2 of 11/12/2011 to the Additional agreement of 12/11/2010 (Document No 657260 - EES 46); additional agreement 3 of 03/09/2012 to the Additional agreement of 12/11/2010 (Document No 657260 - EES 33).

<sup>1010</sup> Telenor's SP wholesale customers included in the margin squeeze test are the following: Phonero; Chili Mobil; Hello (Novotel up to June 2008); Altibox; Ventelo; Ibdium; Bellit (Silver up to June 2008) and NewPhone.

<sup>1011</sup> See the standard price list and its subsequent changes: Annex 7 "prices" (Document No 690719), applicable from 15/01/2008; Annex 7 "prices" (Document No 690718), applicable from 04/06/2008; Annex 7 "prices" (Document No 690717), applicable from 01/10/2008; Annex 7 "prices" (Document No 690694), applicable from 01/07/2009; Annex 7 "prices" (Document No 690706), applicable from 30/08/2009; Annex 7 "prices" (Document No 690702), applicable from 01/11/2009; Annex 7 "prices" (Document No 690703), applicable from 01/12/2009;

#### 10.4.2.3.2 Relevance of the wholesale prices tested by the Authority

794. Telenor submits that the margins tested by the Authority are irrelevant.<sup>1012</sup> Telenor states that NwN and Ventelo supplied mobile telephony and stand-alone MBB services to both business and residential customers (and, in the case of Ventelo, almost entirely to business customers). According to Telenor, margins relating solely to residential stand-alone MBB are not therefore informative of the likelihood of exclusion of NwN and Ventelo.<sup>1013</sup> Telenor considers that the same applies to any SP that was supplying or contemplated supplying mobile telephony as well as MBB to business and/or residential customers. In the case of SPs, Telenor also submits that the two largest SPs (Hello and Phonero) were, like the MVNO TDC, only focused on the business segment throughout the Period under Consideration and that, in any event, wholesale mobile access from Telenor was not indispensable for SPs.<sup>1014</sup>
795. First, as far as NwN and Ventelo are concerned, the Authority notes that they were active in supplying stand-alone MBB services to residential customers during the Period under Consideration. The NRO NwN was active in the relevant retail market (residential stand-alone MBB) during the entire Period under Consideration with its brands *One Call* and *My Call* (which both concerned the “Standard Residential Segment”).<sup>1015</sup> It was therefore an actual competitor during the entire Period under Consideration. The MVNO Ventelo was active in the relevant market as from February 2011.<sup>1016</sup> In the Authority’s view, absent the margin squeeze, it was therefore also a potential competitor during the earlier

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Annex 7 “prices” (Document No 690695), applicable from 01/07/2010; Annex 7 “prices” (Document No 690704), applicable from 01/12/2010; Annex 7 “prices” (Document No 690696), applicable from 01/07/2011; Annex 7 “prices” (Document No 690692), applicable from 01/04/2012; Annex 7 “prices” (Document No 690697), applicable from 01/07/2012; Annex 7 “prices” (Document No 690701), applicable from 01/10/2012 and Annex 7 “prices” (Document No 690705), applicable from 07/12/2012.

<sup>1012</sup> See Reply to the SO, Section 5.3.1.2 and Annex 13 of the Reply to the SO, Section 3.1; see also Annex 1 of the Reply to the SSO – CRA Comments, Section 7.2.

<sup>1013</sup> In other words, Telenor argues that the only relevant wholesale prices would be those offered by Telenor to a customer who supplied only residential stand-alone MBB services.

<sup>1014</sup> In its Reply to the SSO (Section 7.3), Telenor reiterates its claim that its SP wholesale customers could not be considered as actual or potential competitors on the relevant downstream market. In particular, Telenor refers to Phonero and Ibdium (which, according to Telenor, were not active on the residential segment during the Period under Consideration and did not enter afterwards); to Hello (which, according to Telenor, entered the residential segment only in 2014); and to Chili Mobil (which, according to Telenor, only started offering stand-alone MBB to residential customers in 2017 and was focused on selling pre-paid and post-paid subscriptions before that). In respect of its SP agreement with Ventelo, Telenor submits that Ventelo was primarily focused on the business segment and that it did not enter the residential segment until the end of 2009. In addition, according to Telenor, Ventelo had sufficient margins under its MVNO agreement from 2010 and thus the extent to which it had insufficient margins under its SP agreement in 2011 and 2012 is irrelevant (as Ventelo migrated all its subscriptions from its SP agreement to its MVNO agreement by March 2009, except for some M2M subscriptions). As a result, according to Telenor, only one of its SP wholesale customers – Altibox (Lyse Tele) – was active on the relevant downstream market (in 2011 and 2012), although Telenor argues that Altibox was primarily active in offering TV services and FBB (fibre) services.

<sup>1015</sup> See paragraph 992 below.

<sup>1016</sup> See Section 10.5.2.5.4 below.

part of the Period under Consideration.<sup>1017</sup> Both the NRO NwN and the MVNO Ventelo were therefore capable of being margin squeezed. In the Authority's view, it is thus appropriate to include NwN and Ventelo in the margin squeeze assessment.

796. As far as SPs are concerned, as shown in Section 10.5.2.5.4 below, SPs were either active in the relevant market during the Period under Consideration,<sup>1018</sup> entered the relevant market after that period,<sup>1019</sup> and/or were active in a neighbouring market, such as the MBB business market or the residential market for ordinary mobile communications services (which included MTDS).<sup>1020</sup> Moreover, as shown in Section 10.5.2.5.4 below, these operators would, if not already providing residential stand-alone MBB services, have had the ability to enter this market absent Telenor's margin squeeze, and such entry would have otherwise been economically viable. Moreover, the Authority considers that it is appropriate to also include those SPs which, according to Telenor, focused on business customers (such as Ibdidium, Hello and Phonero).<sup>1021</sup> This is because, in the Authority's view, they were credible candidates to enter the residential segment, absent the margin squeeze (see 10.5.2.5.4 below). In other words, at the very least, those SPs should be considered as potential competitors in the relevant downstream market throughout the Period under Consideration, given the particular ease with which SPs could have entered or switched to a new customer segment absent the margin squeeze, as discussed in Section 10.5.2.5.4 below.<sup>1022</sup>

#### 10.4.2.3.3 *Calculation of the mobile data consumption at the downstream level*

797. Because Telenor charges its wholesale customers primarily on a per-MB basis, the wholesale customers' total upstream charge is directly related to the end users' consumption of mobile data at the downstream level.

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<sup>1017</sup> See Section 10.5.2.5.4 below.

<sup>1018</sup> In its Reply to the SSO (footnotes 136 and 138), Telenor acknowledges that both Ibdidium and Hello were reported to have (a limited number of) residential MBB subscriptions in 2011 and 2012 (see Document No 1076159). However, Telenor argues that those subscriptions might, in reality, be business subscriptions and that, in any event, they should not be considered as entry into the residential segment (because, according to Telenor, they could possibly be related to private subscriptions under a business customer agreement). The Authority, however, has no reason for doubting the figures reported in Document No 1076159 (market shares MBB residential market, based on disaggregated figures from Nkom's 2014 e-com market report), according to which both Ibdidium and Hello were active, albeit to a small extent, on the residential MBB market in 2011 and 2012. Telenor also acknowledges that Altibox had a (limited) presence in the residential stand-alone MBB market in 2011 and 2012 (see Reply to the SSO, paragraph 281).

<sup>1019</sup> According to Telenor, Hello entered the residential MBB market in 2014 (see paragraph 277 of the Reply to the SSO). However as noted in footnote 1018 above, Hello was reported to have (a limited number of) residential MBB subscriptions (see Document No 1076159) in 2011 and 2012. Chili Mobil, which was active towards residential customers as an SP customer of Telenor, from 2012, started offering stand-alone MBB in 2017.

<sup>1020</sup> See the Reply the SSO, page 59; and Document No 781987.

<sup>1021</sup> As noted in footnote 1018 above, both Ibdidium and Hello were reported to have (a limited number of) residential MBB subscriptions in 2011 and 2012 (see Document No 1076159).

<sup>1022</sup> In the Reply to the SO, Telenor also claims that, for SPs, wholesale access from Telenor was not an indispensable input for SPs. This argument has been addressed in Section 9.2.6.6 above.

798. The Authority has used Telenor's residential stand-alone MBB customers' data usage patterns as a basis for calculating the average monthly end users' mobile data consumption (MBs) at the downstream level. This average is then used as an input for the calculation of Telenor's upstream charges. This is in line with the EEC test, as it aims at replicating Telenor's offers in the relevant downstream market.

#### 10.4.2.3.4 Calculation of the upstream charge per user

799. In order to calculate the upstream charge paid at the NRO level (by NwN), at the MVNO level (by Ventelo) and by the SPs to Telenor, the Authority has taken into account the specific characteristics of each type of contract, as explained below.

800. The Authority calculates the upstream charges for NwN and Ventelo using the contractual variable price per MB (adjusted for any volume discounts; see paragraph 801 below) and adding per-SIM fees.<sup>1023</sup> For SPs, the Authority calculates the average price per MB by dividing the total cost for mobile data by the total data traffic volume purchased, adjusting for volume discounts (see the next paragraph) and adding the per-SIM fee paid by SPs.<sup>1024</sup>

801. Telenor granted its wholesale customers volume discounts, with a varying structure over time. The variable price model included a retroactive volume discount scheme tied to the number of voice minutes purchased each month. Thus, if total voice minutes reached a certain level, a predefined discount would be applied to the variable price for all traffic categories (including mobile data) in the relevant month. The discounts ranged from [0-20]% of the variable wholesale price.<sup>1025</sup>

802. To model these discounts, in this Decision the Authority uses the actual discount level obtained by each wholesale customer in the relevant period.<sup>1026</sup> This approach ensures

<sup>1023</sup> See also paragraphs 325 and 326 of the SO.

<sup>1024</sup> In the case of SPs, each SP's average upstream charge per user is further weighted by SIM volume to arrive at a weighted average upstream charge per user.

<sup>1025</sup> See, for example, Document No 657260 – EES 27, National Roaming Agreement between Telenor and NwN, dated 3 April 2008, Annex 5, Chapter 2; and Document No 657260 – EES 39, MVNO Agreement between Telenor and Ventelo, dated 20 October 2005, Annex 5, Clause 6 (see page 26). For the SPs, see the standard price lists: see Annex 7 "prices" (Document No 690719), applicable from 15/01/2008; Annex 7 "prices" (Document No 690718), applicable from 04/06/2008; Annex 7 "prices" (Document No 690717), applicable from 01/10/2008; Annex 7 "prices" (Document No 690694), applicable from 01/07/2009; Annex 7 "prices" (Document No 690706), applicable from 30/08/2009; Annex 7 "prices" (Document No 690702), applicable from 01/11/2009; Annex 7 "prices" (Document No 690703), applicable from 01/12/2009; Annex 7 "prices" (Document No 690695), applicable from 01/07/2010; Annex 7 "prices" (Document No 690693), applicable from 01/05/2010 and Annex 7 "prices" (Document No 690689), applicable from 01/01/2010. See also Document No 690726, Annex 2 to Telenor's reply of 18 November 2013 to the Authority's request for information of 16 October 2013 - "4.2a Wholesale-SP". In the standard SP price annexes the volume discount is tied to the number of voice minutes purchased each month; see Clause 22. Thus, if total voice minutes reached a certain level, a predefined discount would be applied to the variable price for all traffic categories (including mobile data) in the relevant month (a discount is granted on all turnover under the agreement with the exceptions set out in a specific list; see Clause 22). The discounts ranged from [0-10]% of the variable wholesale price.

<sup>1026</sup> See also SO, paragraph 327.

that the Authority's analysis reflects the upstream price paid by the type of individual wholesale customer during the Period under Consideration.

#### 10.4.2.3.5 *Modelling of the two-part data pricing option*

803. Telenor notes that, for at least some months during the Period under Consideration, its wholesale customers could choose between two alternative wholesale pricing options.<sup>1027</sup> In these months, wholesale customers had the choice, based on the forecasted usage of each plan, to decide (on a SIM-by-SIM/plan-by-plan basis) whether to be charged for data by Telenor on the basis of either:

- a purely variable (per MB) pricing option, or
- a two-part data pricing ("TPDP") option that involved a fixed fee per active SIM (for NROs and MVNOs) or per subscriber (for SPs), and a smaller variable (per MB) price.<sup>1028</sup>

804. According to Telenor:<sup>1029</sup>

- (a) NwN could choose between the purely variable price and the TPDP from November 2009 to August 2010;<sup>1030</sup>
- (b) Ventelo could choose between the purely variable price and the TPDP from January 2010 to November 2010;<sup>1031</sup> and
- (c) SPs could choose between the purely variable price and the TPDP as of July 2010 and throughout the remainder of the Period under Consideration.<sup>1032</sup>

805. Against this background, Telenor submits that the Authority's approach to modelling upstream charges actually paid by the wholesale customers (see paragraph 800 above)

<sup>1027</sup> See Annex 13 of the Reply to the SO, Section 3.4; Reply to the SSO, Section 7.5 and Annex 1 of the Reply to the SSO – CRA Comments, Section 6.1.

<sup>1028</sup> Paragraph 101 of Annex 13 of the Reply to the SO. Telenor also notes that volume discounts, if applicable, were only available under the purely variable pricing option (footnote 61 of Annex 13 of the Reply to the SO).

<sup>1029</sup> Paragraphs 101 and 102 of Annex 13 of the Reply to the SO.

<sup>1030</sup> See Telenor's e-mail of 25 May 2020 (Document No 1134573) in response to the Authority's question sent by e-mail on 18 May 2020 (Document No 1133872), where Telenor states: "*Telenor offered a change order with a two-part price plan for mobile data to Network Norway at least twice in the autumn of 2009, with proposed effect from 1. November 2009. The draft change orders are attached. Telenor also introduced the price plan as a standard offer under the regulation in March 2010, see the attached letter of 24. March 2010. Network Norway did not sign and never started using the offered alternative price plan. Telenor nevertheless maintains that NwN had the opportunity to use the proposed price plan from 1. November 2009 and thereby avoid the alleged margin squeeze. The fact that they chose otherwise should not be used to the detriment of Telenor. This was their choice, not Telenors [sic]*" (emphasis added by the Authority).

<sup>1031</sup> See Telenor's e-mail of 25 May 2020 (Document No 1134573) in response to the Authority's question sent by e-mail on 18 May 2020 (See Document No 1133872) and Change order 2010-01 (Document No 657260 - EES 42), signed by Ventelo on 20/01/2010, applicable as from 01/01/2010.

<sup>1032</sup> See Telenor's e-mail of 25 May 2020 (Document No 1134573) in response to the Authority's questions sent by e-mail on 18 May 2020 (See Document No 1133872).

overlooks the choice that wholesale customers had in certain months to use a TPDP option instead of the purely variable data pricing option. According to Telenor, rather than using, for the purposes of the margin squeeze calculations, the wholesale pricing option that the wholesale customers actually chose, what is relevant under an EEC test is which of the available data pricing options was the least costly method of supplying each of the EEC's tariff plans.<sup>1033</sup>

806. To remedy this alleged failure, Telenor includes a sensitivity in its revised model annexed to the Reply to the SO.<sup>1034</sup> In particular, for each of Telenor's residential stand-alone MBB plans, Telenor first identifies which of the two wholesale data pricing options was cheaper in any month that the two pricing options were both available. Telenor then assumes that an EEC would select the purely variable price for that entire period if it were cheaper than the TPDP in at least four (even non-consecutive) months. Conversely, if the purely variable price were found to be cheaper than the TPDP in fewer than four months for the MBB plan under consideration, the TPDP is selected for the entire period it was available.<sup>1035</sup>
807. The Authority notes, first of all, that, in respect of NwN, the TPDP was purely an offer made by Telenor in or around November 2009, which was never accepted by NwN and therefore never became part of the contractual terms.<sup>1036</sup> For this reason and for reasons of legal certainty, the Authority considers that the alleged TPDP option should not be taken into account in the margin calculations with regard to prices charged to NwN.
808. Further, the Authority disagrees with Telenor's modelling approach in light of two key methodological points:
- First, the Authority considers that Telenor's proposal to model its own (theoretically) optimal choice between the variable pricing and TPDP options (whenever both were available),<sup>1037</sup> deviates from the legal test for establishing whether a margin squeeze exists within the meaning of Article 54 EEA. The established approach to assessing the existence of a margin squeeze (as set out in paragraph 659 above) is to test the margins available to an EEC on the basis of the upstream prices that the dominant firm charges to its wholesale customers. The Authority thus considers (as further explained

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<sup>1033</sup> Paragraph 106 of Annex 13 of the Reply to the SO.

<sup>1034</sup> See Document No 802600. In particular, in the revised margin squeeze model presented by Telenor, Telenor's approach is implemented by setting sensitivity O to 1.

<sup>1035</sup> According to Telenor, this four-month rule is a conservative approach because upstream charges would not be as low as they could be in principle (see footnotes 68 and 71 of Annex 13 of the Reply to the SO). However, Telenor does not explain why a cut-off period of four months is chosen for the selection of the relevant pricing option (see paragraph 806 above), irrespective of the total number of months a wholesale customer was offered the possibility of choosing between pricing options. To provide a concrete example, consider that, for a specific tariff plan, a wholesale customer has the option of choosing between a purely variable price and a TPDP during 14 months in total. Consider further that the purely variable option is cheaper in at least four (even non-consecutive) months. In that case, the purely variable option is selected for the entire period (14 months). Conversely, if the purely variable option is cheaper in only three months, the TPDP is selected for the entire period (14 months).

<sup>1036</sup> See footnote 1030 above.

<sup>1037</sup> Subject to the four-month rule as set out in paragraph 806 above.

in Section 10.4.2.3.5.1 below) that the correct upstream charges to test in the margin squeeze model are those that Telenor's wholesale customers actually paid.

- Second, notwithstanding that the TPDP never formed part of the contractual terms of NwN, and notwithstanding the Authority's rejection of Telenor's approach to modelling the TPDP, the Authority has undertaken sensitivity testing to evaluate the impact of Telenor's modelling approach on the Authority's margin calculations. As shown in Section 10.4.2.3.5.2 below, this robustness/sensitivity check shows that, even when accounting for the impact of Telenor's approach to modelling the upstream charges on the Authority's calculations (albeit adjusting one parameter for legacy plans in a more realistic way), gross margins remained negative until August 2010 (inclusive) based on the wholesale NRO tariffs charged by Telenor to NwN,<sup>1038</sup> until November 2010 (inclusive) based on the wholesale MVNO tariffs charged by Telenor to Ventelo, and during the entire Period under Consideration based on the wholesale tariffs charged by Telenor to SPs.

10.4.2.3.5.1 The upstream charges to test in the model are those actually invoiced to wholesale customers

809. The Authority maintains its view that the correct approach in this case is to model Telenor's wholesale customers' upstream charges on the basis of the pricing option(s) that those wholesale customers actually chose and used (and, therefore, to make use of invoiced amounts).
810. In line with the established legal test (see paragraph 659 above), the relevant wholesale price should reflect what the dominant firm actually charged its wholesale customers. This is best done by taking into account the wholesale prices actually selected in practice. It would be inappropriate to second-guess *ex post* the decisions made at the time by well-informed and commercially rational market players such as Telenor's wholesale customers. It is reasonable to assume that they would have wanted to minimise their upstream costs and would have done so taking a range of factors into account.
811. By way of example, such factors influencing the decision-making process would have included transactional constraints, such as costs/administration (i.e. frictions) involved in switching from one wholesale pricing option to another,<sup>1039</sup> as well as the wholesale customers' expectations of future retail volumes. Wholesale customers would have also taken into account that, by using the TPDP option, they would not be entitled to volume discounts (as these discounts were only available with a purely variable data tariff).
812. As regards transactional constraints, Telenor's wholesale customers would have incurred certain costs/administration when changing wholesale pricing structure. For example, if NROs and/or MVNOs changed from a purely variable price to a TPDP during the Period under Consideration, they would have had to issue new SIM cards with the new pricing option to their retail customers. This would have entailed a degree of inconvenience for both the wholesale customers and their end users. Further, resources related to relevant

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<sup>1038</sup> The Authority recalls that the TPDP never formed part of NwN's wholesale contract with Telenor. Therefore, the sensitivity check was undertaken purely on a theoretical basis.

<sup>1039</sup> Such transactional constraints could, in principle, be different for the different types of wholesale customers, i.e. NROs, MVNOs and SPs.

customer notifications/management, as well as any end-customer inconvenience during the migration process may have needed to be weighed against the potential costs of reverting back to the original wholesale pricing structure, if retail volumes did not evolve as expected.

813. The influence of such transactional constraints on the decision-making process was confirmed in TDC's response of 15 June 2017<sup>1040</sup> to the Authority's request for information of 13 February 2017. TDC underlined that: *"To switch price plan, the customer had to change SIM. Hence, it was not possible to switch dynamically between the two price plans and the effect of the offer for TDC was limited. Customers were moved to 'Priceplan 2' with a fixed price only if they had a very high data consumption. The red tape, hassle and costs connected with switching SIMs made it burdensome to move between the two price plans in cases where the data consumption of customers changed. For the same reasons, 'Priceplan 2' was not well suited for customers that only had temporarily high data usage."*<sup>1041</sup>
814. Further, on the matter of transactional constraints, the Norwegian Ministry of Transport and Communications found, in an appeal decision relating to Market 15 on 20 December 2012, that: *"A change from one price model to another for existing customers will entail the issuance of a new SIM card. SIM card replacement has a high transaction cost relative to the economic gain. The flexibility that Telenor refers to appears therefore to be very limited."*<sup>1042</sup>
815. The Oslo District Court accepted the Ministry's assessment of the above transaction cost in the subsequent appeal relating to the validity of the Ministry's decision of 16 March 2015, where Telenor was required to repay NOK 16 243 827 including interest to TDC, for breach of its regulatory non-discrimination obligation.<sup>1043</sup> In addition, the Borgarting Court of Appeal, on further appeal, similarly confirmed that: *"TDC's agreement had two price plans for data. The authorities have only used price plan 1, which was somewhat more expensive than price plan 2. Telenor indicates that both were actually used and that both should therefore have been used in the calculation. In fact, both were used. But the State and TDC have stated that price plan 2 required the customer to change SIM. This was very impractical and was therefore done to a very small extent. The State has further stated that the final repayment amount was reduced by ten per cent to take into account uncertainty. According to the evidence, the Court of Appeal assumes that price*

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<sup>1040</sup> Document No 880377.

<sup>1041</sup> Document No 880377.

<sup>1042</sup> The Norwegian Ministry of Transport and Communications' appeal decision regarding Nkom's decision of 23 March 2012 (Vedtak i klagesak om Post- og teletilsynets vedtak 23. mars 2012 – Markedet for tilgang og orignering i offentlige mobilkommunikasjonsnett (tidligere marked l5); see Document No 1075673, page 17; the Authority's translation of: *"En endring fra en prismetode til en annen for eksisterende kunder vil innebære utstedelse av nytt SIM-kort. Utskifting av SIM-kort har en høy transaksjonskostnad som ikke står i forhold til den økonomiske gevinsten for tilbyderer. Fleksibiliteten som Telenor viser til, synes dermed å være svært begrenset."*

<sup>1043</sup> See Case 17-030075TVI-OTIR/05 *Telenor / TDC* of 6 March 2018, page 23, available at: [https://www.regjeringen.no/contentassets/b5733adce9d4f668261a21490ca5bcf/dom\\_tingrett\\_060417.pdf](https://www.regjeringen.no/contentassets/b5733adce9d4f668261a21490ca5bcf/dom_tingrett_060417.pdf); accessed June 2020.

*plan 2 was used to a very small extent and that it was correct to only use the prices for data from price plan 1 to calculate TDC's costs.*"<sup>1044</sup>

816. The fact that NwN never accepted the TPDP offer and Ventelo never used the TPDP option in practice during the Period under Consideration<sup>1045</sup> appears consistent with the above confirmations of frictions in relation to switching wholesale pricing plans, as provided by TDC and the Norwegian Ministry of Transport and Communications, as upheld on appeal (see previous paragraph).
817. However, by assuming a dynamic wholesale tariff optimisation and frictionless switching process across all residential MBB plans/subscribers during the Period under Consideration, Telenor's modelling approach neglects to take due account of any such potential transactional constraints.
818. As to the impact of expectations about future retail volumes on the choice of wholesale pricing option, Telenor's modelling approach assumes further that an EEC would have been able to predict traffic evolution on their retail plans with perfect accuracy during the Period under Consideration. By using *ex post* observed (actual) volumes to model the selection of the optimal wholesale pricing option across all of its plans/subscribers, Telenor uses the benefit of perfect hindsight. However, such an *ex post* assumption of perfect information seriously risks rendering the calculations theoretical in nature. Indeed, no EEC would have had completely perfect information about future data consumption across all of its residential MBB plans when making wholesale pricing decisions during the Period under Consideration.
819. In the Authority's view, testing the wholesale prices actually chosen by the wholesale customers is entirely consistent with the principles of the EEC test. While the application of the EEC test requires taking Telenor's retail portfolio/volumes into account when calculating retail costs and revenues, the Authority does not accept that the EEC test requires taking into account what would have been Telenor's own preferred "hypothetical" choice of wholesale pricing option when determining the upstream charges to include in the model. The very purpose of these wholesale prices was to facilitate access by wholesale customers at different levels (NRO, MVNO and SP levels respectively) to Telenor's mobile network infrastructure. Hence, determining the upstream price that Telenor charged to its competitors is inextricably linked to what those competitors could have plausibly identified as the most commercially rational option

<sup>1044</sup> See Case 18-075217ASD-BORG/03 *Telenor / TDC* of 25 October 2019, page 23, available at: <[https://www.regjeringen.no/contentassets/8c3ecb1lead948f98f93589aedca173e/lagmannsrettens\\_dom\\_telenor\\_tdc.pdf](https://www.regjeringen.no/contentassets/8c3ecb1lead948f98f93589aedca173e/lagmannsrettens_dom_telenor_tdc.pdf)>, accessed June 2020. The Authority's translation of: "TDCs avtale hadde to prisplaner for data. Myndighetene har bare brukt prisplan 1, som var noe dyrere enn prisplan 2. Telenor viser til at begge faktisk ble brukt og at begge derfor burde vært brukt i beregningen. Rent faktisk ble begge brukt. Men staten og TDC har opplyst at prisplan 2 forutsatte at kunden byttet SIM. Dette var svært upraktisk, og det ble derfor gjort i svært liten grad. Staten har videre opplyst at det endelige tilbakebetalingsbeløpet ble redusert med ti prosent for å ta høyde for usikkerhet. Lagmannsretten legger etter bevisførselen til grunn at prisplan 2 i svært liten grad ble brukt og at det var riktig bare å bruke prisene for data fra prisplan 1 på beregning av TDCs kostnader."

<sup>1045</sup> See footnote 1030 above and paragraph 104 of Annex 13 to the Reply to the SO.

during the Period under Consideration, given the different factors to be taken into account and the information available to them at that time.

820. It is furthermore a well-recognised principle of EU/EEA law that the anti-competitive nature of acts must be evaluated at the time when those acts were committed.<sup>1046</sup> This means that the anti-competitive nature of the act at issue must be assessed in the light of what the parties knew or could have reasonably predicted *at the relevant time*.<sup>1047</sup> The benefit of perfect hindsight and information available *ex post* should not change this. The correct approach is to consider the business realities facing wholesale customers at the relevant time. The assessment should recognise the range of different factors and uncertainties capable of influencing their business decisions at the moment of choosing between the two pricing options.
821. Modelling the wholesale tariff selection solely by reference to Telenor’s hypothetical choice *ex post* with perfect hindsight (and using the unrealistic assumptions noted in paragraphs 817 and 818 above) would remove an important foundation on which the margin squeeze test is built and on which it is intended to provide insight, namely whether “*the spread between the wholesale price charged to competitors and the retail price charged to the dominant undertaking’s own customers is negative or insufficient to cover the costs the dominant undertaking has to incur in order to supply the retail service. When this is the case, competitors as efficient as the dominant undertaking can compete on the retail market only at a loss or at artificially reduced levels of profitability*”.<sup>1048</sup>
822. The established purpose of a margin squeeze test is to identify whether or not a dominant company’s own downstream operations could trade profitably on the basis of the upstream price charged by the dominant company to its competitors. Consistent with that framework, the relevant upstream price to test in the model is the wholesale price charged to and actually paid by the wholesale customers, as this provides the best insight into what wholesale customers could plausibly identify at the relevant time (i.e. at the moment

<sup>1046</sup> For example, in its judgment of 6 December 2012, *AstraZeneca*, C-457/10 P, EU:C:2012:770, paragraph 110, the CJEU held that “*the anti-competitive nature of [AstraZeneca’s] acts must be evaluated at the time when those acts were committed*”.

<sup>1047</sup> See Commission Decision of 9 July 2014 in Case AT.39612 – *Perindopril (Servier)*, paragraph 2811, referring to the *AstraZeneca* judgment and the abovementioned quote from it (see footnote 1046 above). The same approach was taken in the Commission Decision of 19 June 2013, in Case AT.39226 – *Lundbeck*, paragraph 669. The *ex ante* approach followed in these cases was confirmed by the European Courts in the related appeal procedures, see e.g. judgment of 12 December 2018, *Servier*, T-691/14, EU:T:2018:922, paragraphs 380 and 385; judgment of 12 December 2018, *Mylan*, T-682/14, EU:T:2018:907, paragraphs 102, 108 and 112; judgment of 8 September 2016, *Lundbeck*, T-472/13, EU:T:2106:449, paragraphs 369, 401, 435–436 and 801, and particularly paragraph 138: “*As a preliminary point, the Court confirms the Commission’s approach, as it can be seen from the contested decision as a whole, which consisted in principally taking into account evidence prior to or contemporaneous with the date on which the agreements at issue were concluded*”. See also judgment of 30 January 2020, *Generics (UK)*, C-307/18, EU:C:2020:52, paragraph 43.

<sup>1048</sup> Judgment of 30 May 2018 in Case E-6/17 *Fjarskipti* [2018] EFTA Ct. Rep. 78, paragraph 59 (emphasis added by the Authority). See also *Slovak Telekom* Decision, paragraph 828; *Telefónica* Decision, paragraph 312 (confirmed on appeal: judgment of 29 March 2012, *Telefónica*, T-336/07, EU:T:2012:172, paragraph 194); *Deutsche Telekom* Decision, paragraph 107 (confirmed on appeal: judgment of 10 April 2008, *Deutsche Telekom*, T-271/03, EU:T:2008:101, paragraphs 166–168 and 199; judgment of 14 October 2010, *Deutsche Telekom*, C-280/08 P, EU:C:2010:603, paragraph 161).

of making their choice between the two pricing options) as the most commercially rational option. To do otherwise would render the upstream charges used in the model academic and lacking a concrete link to the prices that Telenor's upstream division charged its competitors in practice.

823. In other words, the Authority considers that upstream charges should be modelled using a "revealed preferences" approach, whereby Telenor's wholesale customers' choices are the result of a complex, yet rational decision-making process which cannot be reasonably replicated or second-guessed today. Accordingly, in the Authority's margin squeeze model, Telenor's wholesale customers' rational preferences are reflected in the actual choices made at the time. It is therefore these wholesale pricing options that the wholesale customers actually chose (and were invoiced for by Telenor) that are used to test whether a margin squeeze arose in this case.
824. Indeed, the complex nature of this tariff selection process is reflected by the fact that, as acknowledged by Telenor,<sup>1049</sup> NwN never accepted Telenor's TPDP offer and Ventelo never used the TPDP option, when it was available to them, whereas some SPs, including Hello and Phonero, did make use of the TPDP option in practice. The Authority thus calculates upstream NRO and MVNO charges for NwN and Ventelo on the basis of contractual prices under the purely variable data pricing option only (since they either never accepted or never made use of the TPDP option and the contractual prices for the variable pricing option are therefore equivalent to the invoiced prices). For SPs, the Authority calculates upstream charges on the basis of invoice data (i.e. total invoiced costs for mobile data divided by total data traffic volumes purchased), thus reflecting the mix of wholesale pricing options selected (including the TPDP option when it was actually used) during the Period under Consideration.<sup>1050</sup>

#### 10.4.2.3.5.2 Sensitivity calculations as a robustness check

825. While the Authority's margin calculations are undertaken on the basis of the wholesale prices that were actually invoiced to Telenor's wholesale customers,<sup>1051</sup> the Authority has nonetheless undertaken sensitivity testing<sup>1052</sup> to evaluate the impact of Telenor's modelling approach on the Authority's margin calculations. This testing is, however, intended purely as a robustness/sensitivity check and is without prejudice to the Authority's primary margin calculations.<sup>1053</sup>
826. In using observed volumes to model the selection of the optimal wholesale pricing structure, Telenor assumes that wholesale customers would have been able to predict traffic evolution on all of their retail tariff plans during the Period under Consideration. Telenor also assumes that wholesale customers could have switched dynamically between wholesale pricing options for all retail customers/tariff plans. These assumptions

<sup>1049</sup> See footnote 1030 above and paragraph 104 of Annex 13 to the Reply to the SO.

<sup>1050</sup> See SO, paragraphs 325 and 326.

<sup>1051</sup> For the reasons set out in Section 10.4.2.3.5.1.

<sup>1052</sup> See Document No 1115065 (Excel spreadsheet), which was attached to the LoF.

<sup>1053</sup> See Document No 1068848 (Excel spreadsheet).

risk rendering the calculations overly theoretical. The Authority has built a more realistic assumption into its robustness/sensitivity calculations. This involves setting a parameter about the retail tariff plans for which dynamic switching was likely to be practicable.

827. This parameter takes into account the fact that, during the Period under Consideration, a wholesale customer would not have had perfect information about the future evolution of its retail tariff plans and would have had to make a pricing choice based on retail volume projections and possible transaction costs/administration (i.e. frictions) involved in moving retail customers across wholesale pricing plans in practice. Unlike Telenor's approach, which assumes the selection of the TPDP across all retail residential stand-alone MBB plans whenever that pricing option was available, the Authority applies Telenor's dynamic optimisation of wholesale pricing options only in relation to retail plans which were actively offered/marketed to end users when the TPDP was available (i.e. "active retail plans"), and thus mainly only for new customers, subject to one limited exception (in Telenor's favour), noted in paragraph 828 below. The Authority does not apply the dynamic optimisation process to customers on discontinued retail tariff plans, i.e. legacy customers on retail plans that were no longer being actively marketed to end users when the TPDP option became available. This is because, in the Authority's view, it is more realistic to assume the selection of the TPDP option only for customers on active retail plans, and thereby mostly only for new customers signed up by the EEC after the TPDP became available, because this largely avoids the transaction costs/administration associated with switching retail customers between different wholesale pricing plans in practice. In the Authority's view, this approach provides a more realistic evaluation of the possible impact of the TPDP option on the Authority's primary calculations (which are set out in Document No 1068848 (Excel spreadsheet)).
828. The Authority's robustness/sensitivity calculations are still conservative (in Telenor's favour), however, because they otherwise allow for a cost-minimising choice of wholesale pricing plan in line with the remainder of Telenor's modelling approach. This implies assuming, in Telenor's favour, perfect optimisation of wholesale pricing plan based on observed traffic volumes for customers on active retail plans. Further, as one retail plan was actively marketed both before and after the TPDP became available (i.e. *Mobilt Bredbånd Dag&Natt*), the Authority's robustness/sensitivity calculations include, in Telenor's favour, the selection of the TPDP option also for existing customers on that particular plan. In addition, the Authority makes use of Telenor's four-month rule for selecting the cost minimising wholesale pricing option (as set out in paragraph 806 above), despite no supporting information being provided by Telenor for the choice of this four-month cut off period.
829. In its Reply to the LoF, Telenor contends that the Authority is mistaken in its assumption that there would have been frictions for SPs switching customers on legacy plans to the TPDP option. According to Telenor, a key difference between SPs and MVNOs/NROs respectively is that SPs did not issue their own SIM cards to end-customers. According to Telenor, SPs had the option in any month to switch any or all of their customers to the TPDP option without having to issue new SIMs or hardware to end-customers, and without their end-customers experiencing any change or disruption. Telenor therefore asserts that the Authority should model the margins available to SPs from July 2010 onwards by taking the TPDP option into account across all plans.

830. In relation to the NRO NwN and the MVNO Ventelo (which did have to issue new SIMs in order to take advantage of the TPDP option), Telenor does not deny that there would have been some costs associated with switching legacy customers to SIMs to which the TPDP option would be applied. However, it argues that the benefits would have exceeded the costs.<sup>1054</sup>
831. According to Telenor's cost-benefit calculations, it would have taken, on average, less than one month for the benefits of switching end-customers to the TPDP option to match and therefore recover the costs of replacing SIMs.<sup>1055</sup> If the wholesale customer also wanted to replace the retail customer's device, it would still have taken only two months to recover the new device costs. According to Telenor, viewed over 12 months, savings in wholesale costs of around NOK 2 200 (for NwN) and NOK 2 400 (for Ventelo) would have dwarfed both SIM costs (NOK 70) and any new device costs (which averaged NOK 372 including routers, but which would have been lower for USBs). Telenor therefore rejects the Authority's assumption that the transaction/administration costs of switching would have been prohibitively high relative to the benefits of doing so. According to Telenor, it would have been a rational business decision for an EEC to switch end-customers to the alternative price plan.
832. The Authority considers, however, that Telenor's cost-benefit assessment is one-dimensional in nature. It neglects to account fully for the range of factors involved in the decision-making process on the available wholesale pricing options during the Period under Consideration.
833. In addition to assuming a dynamic and frictionless switching process between wholesale pricing options, Telenor's modelling approach assumes that an EEC would have been able to predict traffic evolution accurately across all retail plans/customers. By using *ex post* observed (actual) volumes to model the selection of the optimal wholesale pricing structure across all of its tariff plans/customers, Telenor uses the benefit of perfect hindsight to model the optimal tariff choice it perceives an EEC would have made. However, such an *ex post* assumption of perfect information seriously risks rendering the calculations theoretical in nature.
834. Indeed, not even an EEC would have had perfect information about future data consumption across all of its residential stand-alone MBB plans when making a choice of wholesale pricing structure at the relevant time during the Period under Consideration. The EEC test must be applied in a credible way, such that it retains some relationship to the reality facing as-efficient competitors competing at each of the different access levels (i.e. NRO, MVNO and SP levels respectively) during the Period under Consideration. To do otherwise would be tantamount to applying a 'more efficient competitor' test.
835. In this respect, the Authority's application of Telenor's dynamic optimisation/frictionless switching assumption to all *active* retail plans is already quite a generous assumption in Telenor's favour and sets a high (and potentially unrealistic) threshold for an EEC in terms of forecasting and switching capabilities during the Period under Consideration.

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<sup>1054</sup> See Reply to the LoF, Section 5.1.

<sup>1055</sup> See Reply to the LoF, Section 5.1.

The Authority considers that extending that dynamic optimisation process to legacy customers would understate the range of factors influencing the wholesale pricing decisions of as-efficient competitors at each of the relevant access levels and risks departing too far from the reality of an EEC during the Period under Consideration.

836. This is because considerations related to the transaction costs/administration involved in migrating between wholesale pricing options would have been taken into account at the relevant time. This was explicitly confirmed by the MVNO TDC (see paragraph 813 above). It stated that it was not possible to switch dynamically between the two price plans during the Period under Consideration and customers were moved to a fixed price only if they had a very high data consumption. TDC underlined that the red tape, hassle and costs connected with switching SIMs made it burdensome to move between the two price plans in cases where the data consumption of customers changed. Moreover, the Norwegian Ministry of Transport and Communications also established in 2012 that SIM card replacement had a high transaction cost relative to the economic gain, as upheld on appeal.<sup>1056</sup>
837. In addition, while SPs may not have needed to replace end-customers' SIM cards and this may indeed suggest why Hello and Phonero used the TPDP option,<sup>1057</sup> the use of resources needed to facilitate the migration process from a variable pricing structure to a TPDP would nonetheless have had to be weighed against the inconvenience of potentially needing to reverse the decision should the retail volumes not materialise as expected. Indeed, the mixture of wholesale pricing options selected by the SPs in practice suggests that the switching process was not as frictionless or dynamic as implied by Telenor. Further, as explained in paragraph 835 above, a number of material modelling decisions have already been taken in Telenor's favour for the purposes of this robustness/sensitivity check. The Authority does not consider it appropriate, however, to dismiss entirely the complexity/uncertainty of the decision-making process that an EEC would have faced when selecting its wholesale price in practice.
838. For the purposes of a meaningful sensitivity/robustness check that still bears a relationship to the reality of the decision-making process for an EEC during the Period under Consideration, the Authority's robustness/sensitivity check applies Telenor's dynamic optimisation process only to retail plans that were actively offered/marketed to end users (active retail plans) and not to customers on discontinued retail plans. To accept all of Telenor's assumptions regarding perfect information and a dynamic switching process across all residential stand-alone MBB tariff plans and customers during the Period under Consideration, would, in the Authority's view, be equivalent to applying a 'more efficient competitor' test.
839. This robustness/sensitivity check (see Document No 1115065 (Excel spreadsheet)) shows that, even when adopting Telenor's modelling approach (albeit adjusting one parameter for legacy plans in a more plausible/realistic way), gross margins remain negative for the same time periods as under the Authority's primary margin calculations

<sup>1056</sup> See paragraphs 814 and 815 above.

<sup>1057</sup> This is reflected in the Authority's primary margin calculations (see Document No 1068848 (Excel spreadsheet)), which take the actual wholesale pricing decisions into account.

(see Document No 1068848 (Excel spreadsheet)), i.e. from August 2008 to August 2010 (inclusive) based on the wholesale NRO tariffs charged by Telenor to NwN, from January 2008 until November 2010 (inclusive) based on the wholesale MVNO tariffs charged by Telenor to Ventelo, and during the entire Period under Consideration based on the wholesale tariffs charged by Telenor to SPs.

#### 10.4.2.3.6 *Upstream fixed fees: Network access fees and other upstream fixed fees*

840. At certain times during the Period under Consideration, Telenor charged some of its wholesale customers two different types of upstream fixed fees, notably: (i) a “network access fee”; and (ii) other upstream fixed fees linked to the number of active SIMs.
841. Regarding the *network access fee*,<sup>1058</sup> the Authority agrees with Telenor<sup>1059</sup> that such a fee was not incremental during the Period under Consideration (i.e. it did not vary with the volume of residential stand-alone MBB services provided). Accordingly, the Authority has not included network access fees in the calculation, which is also Telenor’s position.<sup>1060</sup>
842. As far as *other upstream fixed fees* are concerned, Telenor charged NwN and Ventelo, starting from September 2010 and December 2010 respectively, a monthly fixed fee linked to a minimum number of active SIMs, with additional increases based on the number of active SIMs above the minimum.<sup>1061</sup>
843. In its Reply to the SO,<sup>1062</sup> Telenor presents the actual total number of active SIMs of NwN and Ventelo, as well as an estimate of the total number of active SIMs of these two wholesale customers *excluding* stand-alone MBB active SIMs.<sup>1063</sup> On the basis of these estimates, Telenor submits that, for both NwN and Ventelo, in the initial months, the total number of active SIMs was below the thresholds that would have triggered an increase in upstream fees.<sup>1064</sup> Accordingly, Telenor argues that, in those months, both NwN and Ventelo could increase their number of stand-alone MBB active SIMs without triggering an increase in upstream fixed fees. As a result, according to Telenor, those fees were not incremental to the provision of residential stand-alone MBB and should not be included in the calculation.<sup>1065</sup>

<sup>1058</sup> This fee was charged to Ventelo until December 2010.

<sup>1059</sup> See Section 3.5.2 of Annex 13 of the Reply to the SO.

<sup>1060</sup> In the Authority’s model (see Document No 1068848), this is achieved by setting sensitivity A to 0.

<sup>1061</sup> By way of example, [CONFIDENTIAL: Description of price structure].

<sup>1062</sup> See Section 3.5.2 of Annex 13 of the Reply to the SO.

<sup>1063</sup> From September 2010 and December 2010 until December 2012, respectively, for NwN and Ventelo.

<sup>1064</sup> Specifically, Telenor submits that, between September 2010 and April 2011, NwN’s total number of active SIMs was well below 475 000 and that, between December 2010 and May 2011, Ventelo’s total number of active SIMs was well below 200 000.

<sup>1065</sup> In its Reply to the SO, Telenor argues that a similar reasoning applies to other months in which neither the actual provision of stand-alone MBB nor a significant increase in stand-alone MBB sales by NwN and Ventelo would have been likely to result in an increase in upstream fixed fees. However, since no actual figures are

844. The Authority disagrees with Telenor on this point, in that it considers that an equally efficient competitor with an increasing number of active SIMs would have viewed upstream fixed fees linked to the number of active SIMs as incremental. Accordingly, such fees should be included in the margin squeeze calculations. In the Authority's view, the fact that both NwN and Ventelo were below the relevant thresholds during certain months is irrelevant for the correct application of the EEC approach. In the Authority's view, what matters is whether a downstream competitor as efficient as Telenor would have paid such fees if it had increasing volumes of active SIMs.<sup>1066</sup>
845. Related to this issue, Telenor submits that, for those months during which the upstream fixed fees should be treated as incremental and therefore included in the calculations, it was necessary to apply a "rescaling factor".<sup>1067</sup>
846. On this point, in the SO, the Authority calculated a per-active-SIM figure by dividing the invoiced amounts of the upstream fixed fees of each wholesale customer by the wholesale customer's number of active SIMs, and added this figure to the Average Variable Wholesale Cost per User. To take into account that Telenor had fewer active SIM cards than subscribers, Telenor suggests rescaling the add-on to the Average Variable Wholesale Cost per User by Telenor's ratio between active SIMs and subscribers.<sup>1068</sup> The result of this rescaling would be that, compared to the Authority's approach in the SO, a smaller amount is added to the Average Variable Wholesale Cost per User.
847. The Authority disagrees that the rescaling should take place as proposed by Telenor. The fees charged by Telenor to NwN and Ventelo were based on the number of active SIMs, not subscribers.<sup>1069</sup> The Authority considers that there is therefore no basis for a calculation based on anything other than the number of active SIMs. Accordingly, the Authority has disregarded the rescaling method suggested by Telenor.<sup>1070</sup>
848. The Authority observes finally that, in any event, the above-described monthly fees applied after the end of the infringement periods as established in relation to the

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available for stand-alone MBB active SIMs, Telenor suggests a conservative approach and treats the upstream fixed fees as incremental for these other months.

<sup>1066</sup> In the Authority's model (see Document No 1068848), the Authority's approach amounts to setting sensitivity P to 0.

<sup>1067</sup> See Section 4.3.2 of Annex 13 of the Reply to the SO.

<sup>1068</sup> See paragraphs 149-151 of Annex 13 of the Reply to the SO.

<sup>1069</sup> Regarding NwN, see Clause 4.2 (coverage, the Authority's translation of "*dekning*") of Addendum 2 of 18/08/2010 to Telenor's NRA agreement with NwN (Document No 657260 - EES 28): "*Network Norway will pay a price for coverage, based on MSISDN who has had traffic for the last 90 day period [...]*" (the Authority's translation of: "*Network Norway skal betale en pris for dekning, basert på MSISDN som har hatt trafikk siste 90 dagers periode [...]*"). MSISDN is defined as "*Mobile Subscriber International Subscriber Directory Number, a unique number identity usually assigned to SIM (Subscriber Identity Module)*" (see Clause 7.1; the Authority's translation of: "*Mobile Subscriber International Subscriber Directory Number, unik nummeridentitet som normalt tilordnes SIM (Subscriber Identity Module)*"). Regarding Ventelo, see Clause 4 of the Additional agreement of 12/11/2010 to the MVNO Agreement between Telenor and Ventelo (Document No 657260 - EES 44).

<sup>1070</sup> In the Authority's model (see Document No 1068848), the Authority's approach amounts to setting sensitivity I to 0.

wholesale fees charged to NwN and Ventelo.<sup>1071</sup> Therefore, even if Telenor's rescaling method were accepted, this would have no impact on these infringements as found.

#### 10.4.2.3.7 *Upstream per-SIM fees charged to SPs*

849. In its Reply to the SO,<sup>1072</sup> Telenor notes that, while SPs were charged a variety of per-SIM fees, only one of those related to stand-alone MBB plans and was therefore to be included in the margin squeeze calculation.<sup>1073</sup> Telenor submits that the approach followed by the Authority in the SO therefore overstates per-SIM fees associated with stand-alone MBB plans for SPs from 2010 to 2012 and understates such fees in 2008 and 2009 (because no invoice data was available for those two years).<sup>1074</sup>

850. The Authority has accepted Telenor's proposed approach in this respect and has only included the relevant per-SIM fee in its final calculations.<sup>1075</sup>

#### 10.4.2.3.8 *Use of own network by NwN*

851. Telenor submits that, during the Period under Consideration, NwN (an NRO, i.e. an operator that was able to convey part of its mobile data requirements on its own network and relied on other MNOs for the remaining portion) had increased the use of its own network to convey mobile data and, conversely, relied less on Telenor's network for that purpose.<sup>1076</sup>

852. According to Telenor, the Authority does not take into account this development in its margin squeeze assessment. In particular, in Telenor's view, the Authority does not recognise that NwN's upstream costs would have decreased as it made greater use of its own network to convey the data volumes generated by its residential stand-alone MBB customers. In particular, Telenor submits that, although it did not have information on NwN's costs of using its own network, a reasonable assumption would be for such costs to be close to zero, if not zero.<sup>1077</sup>

<sup>1071</sup> The per-SIM fees applied from September 2010 and December 2010 respectively, for NwN and Ventelo: see paragraphs 842-843 above. The infringement periods in respect of the wholesale NRO tariffs charged to NwN and the wholesale MVNO tariffs charged to Ventelo ended on 31 August 2010 and on 30 November 2010 respectively: see paragraph 1034 below.

<sup>1072</sup> See Section 4.4 of Annex 13 of the Reply to the SO.

<sup>1073</sup> The relevant upstream per-SIM fee concerns a "subscription charge" of NOK [CONFIDENTIAL] per month. The other per-SIM fees charged by Telenor which were not relevant for the margin squeeze calculations in this case included: twin card fees, voicemail activation fees, mobile fax fees, GSM fax fees, GSM data fees and extra data card fees.

<sup>1074</sup> In the SO, the Authority included all per-SIM fees using invoice data and calculated a per-SIM amount by dividing total fixed fees invoiced by Telenor to each SP by the number of SIMs of that SP. This per-SIM amount was then added to the estimated Average Variable Wholesale Cost per User.

<sup>1075</sup> In the Authority's model (see Document No 1068848), this is achieved by setting sensitivity J to 1.

<sup>1076</sup> See Section 3.6 of Annex 13 of the Reply to the SO.

<sup>1077</sup> Paragraph 127 of Annex 13 of the Reply to the SO.

853. The Authority disagrees with Telenor on this point.
854. First, from a methodological point of view, the Authority notes that, according to settled case law, in principle and for reasons of legal certainty, an EEC test should be applied, based on the dominant undertaking's own revenues and costs.
855. In this respect, the case law states that “*in order to assess the lawfulness of the pricing policy applied by a dominant undertaking, reference should be made, in principle, to pricing criteria based on the costs incurred by the dominant undertaking itself and on its strategy*”.<sup>1078</sup> Moreover, as regards a pricing practice which causes a margin squeeze, “*the use of such analytical criteria can establish whether that undertaking would have been sufficiently efficient to offer its retail services to end-users otherwise than at a loss if it had first been obliged to pay its own wholesale prices for the intermediary services*”.<sup>1079</sup>
856. Further, “*the validity of such an approach is reinforced by the fact that it conforms to the general principle of legal certainty, since taking into account the costs and prices of the dominant undertaking enables that undertaking to assess the lawfulness of its own conduct, which is consistent with its special responsibility under Article 102 TFEU.*” Indeed, “*while a dominant undertaking knows its own costs and prices, it does not as a general rule know those of its competitors*”.<sup>1080</sup> Telenor confirms that it does not have information on NwN's costs of using its own network.<sup>1081</sup>
857. For these reasons, which also apply to the present case, the GCEU concluded in the *Telefónica* case that the Commission was correct to carry out its analysis of Telefónica's conduct on the basis of the EEC criterion and thus by reference to the costs incurred by Telefónica, without undertaking a study of the margins of the main alternative operators on the Spanish market.<sup>1082</sup>

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<sup>1078</sup> See judgment of 29 March 2012, *Telefónica*, T-336/07, EU:T:2012:172, paragraph 190; see also judgment of 14 October 2010, *Deutsche Telekom*, C-280/08 P, EU:C:2010:603, paragraphs 198–202; and judgment of 17 February 2011, *TeliaSonera Sverige*, C-52/09, EU:C:2011:83, paragraph 41 and the case law cited. According to the case law, in some cases the costs and prices of competitors may be relevant to the examination of a pricing practice. However, it is only where it is not possible, in the light of the particular circumstances indicated by the CJEU, to refer to the prices and costs of the dominant undertaking that the prices and costs of competitors on the same market should be examined (see judgment of 30 May 2018 in Case E-6/17 *Fjarškipti* [2018] EFTA Ct. Rep. 78, paragraphs 63–64; see also judgment of 17 February 2011, *TeliaSonera Sverige*, C-52/09, EU:C:2011:83, paragraphs 45 and 46.). Telenor has, however, not maintained that this is the case here and agrees that an EEC test should be applied (see paragraph 365 of the Reply to the SO).

<sup>1079</sup> See judgment of 29 March 2012, *Telefónica*, T-336/07, EU:T:2012:172, paragraph 191; see also judgment of 14 October 2010, *Deutsche Telekom*, C-280/08 P, EU:C:2010:603, paragraph 201; and judgment of 17 February 2011, *TeliaSonera Sverige*, C-52/09, EU:C:2011:83, paragraph 42.

<sup>1080</sup> See judgment of 17 February 2011, *TeliaSonera Sverige*, C-52/09, EU:C:2011:83, paragraph 44; see also judgment of 14 October 2010, *Deutsche Telekom*, C-280/08 P, EU:C:2010:603, paragraph 202; and judgment of 29 March 2012, *Telefónica*, T-336/07, EU:T:2012:172, paragraph 192. See also judgment of 30 May 2018 in Case E-6/17 *Fjarškipti* [2018] EFTA Ct. Rep. 78, paragraph 63.

<sup>1081</sup> Paragraph 127 of Annex 13 of the Reply to the SO.

<sup>1082</sup> See judgment of 29 March 2012, *Telefónica*, T-336/07, EU:T:2012:172, paragraph 194.

858. Second, in this specific case, Telenor's argument regarding NwN's use of its own network applies to a *specific* type of competitor, i.e. one which has already invested in its own network and thus is able to convey on such a network at least part of its mobile data in at least some geographic areas. By its very nature, Telenor's argument does not apply to (potential) competitors who have not yet made investments to build their own network (and thus are below NwN in the 'ladder of investment').
859. The case law however indicates that, irrespective of its position on the ladder of investment, no competitor should be prevented from gradually climbing the ladder due to a margin squeeze at a lower level of the ladder. Indeed, all levels of the ladder should be accessible since "*the process that enables alternative operators to invest gradually in their own infrastructure can constitute a viable strategy only where there is no margin squeeze practice at the different levels of the ladder*".<sup>1083</sup> In this respect, in its judgment in the *Telefónica* case, the GCEU considered that the Commission correctly observed that the margin squeeze imposed by Telefónica probably delayed the entry and growth of its competitors and their ability to achieve a sufficient level of economies of scale to justify investments in their own infrastructure.<sup>1084</sup> The Authority considers that, similarly, Telenor's argument regarding the use of its own network by NwN must be rejected.
860. The Authority recalls further that an abuse of a dominant position under Article 54 EEA is an objective concept relating to the conduct of a dominant undertaking which, through recourse to methods different from those governing normal competition on the basis of the performance of commercial operators, has the effect of hindering the maintenance of the degree of competition still existing in the market or the growth of that competition.<sup>1085</sup>
861. Whether a dominant undertaking's conduct is abusive, therefore, turns on the risks that such conduct poses to competition on the market generally. It is not limited to, or conditioned on, whether a particular customer (and downstream competitor) is able to take steps to limit the potential impact of the dominant undertaking's conduct on its position (for example, by making greater use of its own network to convey the data volumes generated by its residential stand-alone MBB customers). The EFTA Court has confirmed that the application of an EEC test "*is also in line with the objective nature of the margin squeeze assessment, which looks more generally at the potential exclusionary effect on hypothetical as-efficient competitors rather than assess whether actual, individual competitors have in fact been excluded*".<sup>1086</sup>
862. As the European Courts have held, the abusiveness of a margin squeeze practice must be assessed not only with regard to the possibility that the effect of that practice may be that equally efficient competitors who are already active in the relevant downstream market

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<sup>1083</sup> Ibidem, paragraph 196.

<sup>1084</sup> Ibidem, paragraph 196.

<sup>1085</sup> See judgment of 27 March 2012, *Post Danmark*, C-209/10, EU:C:2012:172, paragraph 24; judgment of 14 October 2010, *Deutsche Telekom*, C-280/08 P, EU:C:2010:603, paragraphs 174, 176 and 180; judgment of 17 February 2011, *TeliaSonera Sverige*, C-52/09, EU:C:2011:83, paragraph 27; and judgment of 29 March 2012, *Spain v Commission*, T-398/07, EU:T:2012:173, paragraph 89.

<sup>1086</sup> Judgment of 30 May 2018 in Case E-6/17 *Fjaraskipti* [2018] EFTA Ct. Rep. 78, paragraph 63.

may be driven from it, but also by taking into account any barriers which the practice is capable of creating for operators who are potentially equally efficient and who are not yet present on the downstream market.<sup>1087</sup> If the lawfulness of a dominant undertaking's conduct were contingent on assessing whether a competitor has taken steps to limit the potential impact of that conduct on its position (which is in any event not accepted), this would risk failing to capture the potential effect of the conduct on other downstream competitors and/or the impact of the conduct on the barriers for entry of potential competitors on the downstream market.

863. For example, even if one customer were able to take steps to reduce the impact of the dominant undertaking's conduct on its position, the conduct may, nevertheless, artificially increase barriers to entry for potential competitors, thereby making market entry less attractive and, ultimately, reducing consumers' sources of supply on the retail market.<sup>1088</sup> The dominant undertaking's conduct would, therefore, still be capable of having a distortive impact on competition by hindering the maintenance of the degree of competition existing in the market or the growth of that competition.
864. On the basis of the above, the Authority rejects Telenor's claim that the effect of NwN's increasing use of its own network should be taken into account for the margin squeeze calculation in this case.<sup>1089</sup>

#### ***10.4.3 Results from comparing Telenor's downstream revenues and upstream charges***

865. Having calculated Telenor's downstream revenues and upstream charges (as explained in the previous Sections 10.4.2.2 and 10.4.2.3, respectively), the Authority can also calculate the resulting Average Margin Per User ("AMPU"), before taking into account downstream costs. Specifically, the AMPU is calculated by subtracting the average monthly upstream charge per user charged by Telenor, for each type of Telenor's wholesale customers, from Telenor's average monthly ARPU. This is the gross margin<sup>1090</sup> which an equally efficient or as-efficient competitor of Telenor would have earned if it had paid the same wholesale prices as those charged by Telenor to its wholesale customers during the Period under Consideration and it replicated Telenor's residential stand-alone MBB portfolio in the downstream market.

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<sup>1087</sup> See judgment of 17 February 2011, *TeliaSonera Sverige*, C-52/09, EU:C:2011:83, paragraph 94; and judgment of 14 October 2010, *Deutsche Telekom*, C-280/08 P, EU:C:2010:603, paragraph 178.

<sup>1088</sup> See to that effect, judgment of 29 March 2012, *Telefónica*, T-336/07, EU:T:2012:172, paragraph 192; judgment of 14 October 2010, *Deutsche Telekom*, C-280/08 P, EU:C:2010:603, paragraph 182; and judgment of 2 April 2009, *France Télécom*, C-202/07 P, EU:C:2009:214, paragraph 112.

<sup>1089</sup> In the Authority's model (see Document No 1068848), this is achieved by setting sensitivity Q to 0.

<sup>1090</sup> I.e. before taking downstream costs into account.

866. The Authority's results – presented in Table 14, Table 15, Table 16 in Annex 1 to this Decision (see Document No 1068848 (Excel spreadsheet) for the underlying calculations) – show that:
- (a) If it had to pay the wholesale NRO tariffs charged by Telenor to NwN, an as-efficient competitor of Telenor would have earned negative gross margins<sup>1091</sup> in all months from 1 August 2008 to 31 August 2010; after this period the gross margins became positive;
  - (b) If it had to pay the wholesale MVNO tariffs charged by Telenor to Ventelo, an as-efficient competitor of Telenor would have earned negative gross margins from 1 January 2008 to 30 November 2010; from 1 January 2012 to 31 March 2012, in October 2012 and in December 2012;
  - (c) If it had to pay the wholesale tariffs charged by Telenor to SPs, an as-efficient competitor of Telenor would have earned negative gross margins during the entire period from 1 January 2008 to 31 December 2012.

#### 10.4.4 Telenor's downstream costs

867. The Authority has not considered it necessary to conduct a detailed analysis of Telenor's costs at the downstream level in this case, because the negative gross margins presented in the previous section would only become larger (that is, more negative) if Telenor's downstream costs were taken into account.
868. The Authority notes, however, that the economic consultancy firm Analysys Mason carried out a detailed analysis of retail costs in conjunction with an *ex ante* margin squeeze modelling work performed on behalf of Nkom.<sup>1092</sup> In that context, Analysys Mason defined a number of cost categories that were considered relevant for *ex ante* margin squeeze testing on various mobile communications services, including MBB. Its cost estimates are based on actual costs for Telenor and Telia.
869. In particular, Analysys Mason defined the following incremental cost categories:

- (a) Subscriber acquisition costs – estimated by Analysys Mason at NOK 540 per subscriber per year for MBB, comprising the various incremental costs of acquiring new customers, including sales commissions, cost of hardware/equipment such as MBB modems and SIM cards, and promotional offers;<sup>1093</sup>
- (b) Personnel costs – estimated by Analysys Mason at NOK 115 per subscriber per year for MBB, comprising additional costs for personnel needed for providing MBB services;

<sup>1091</sup> I.e. the wholesale costs would have been higher than the retail revenues for residential stand-alone MBB services.

<sup>1092</sup> See Analysys Mason, Report for the Norwegian Post and Telecommunications Authority, Margin squeeze tests of Telenor's retail offers based on MVNO and national roaming agreements – changes to the model and rationale behind our assumptions", Confidential version for Telenor, 30 October 2013 (Document No 1136850).

<sup>1093</sup> In the Authority's calculations, customer acquisition costs are partially reflected in the calculations, as the ARPU measurements take promotional offers into account.

- (c) Marketing costs – estimated by Analysys Mason to have a fixed component of NOK 50 per year for MBB (mainly for mass media marketing) and a variable cost of NOK 32 per subscriber per year;
- (d) Billing and collection costs (such as set-up fees for IT systems and annual service and maintenance charges) – estimated at NOK 30 fixed (irrespective of which and of how many segments an operator enters, i.e. only incremental for the first entry) and a variable cost of NOK 12 per subscriber per year for MBB;
- (e) General and administration costs – estimated at 0.6% of retail revenues per year;
- (f) Customer care costs – estimated at 1.15% of retail revenues per year; and
- (g) Bad debt – estimated at NOK 50 per year per subscriber.

#### *10.4.5 Conclusion on the margin squeeze assessment*

870. As set out in Section 10.4.3 above, the Authority's results show that an EEC paying the wholesale NRO tariffs charged by Telenor to NwN would have reported negative gross margins in all months<sup>1094</sup> from 1 August 2008 to 31 August 2010. As will be shown below, this finding is in itself sufficient to conclude that, during that period, Telenor engaged in an anti-competitive margin squeeze, without the need to consider its downstream costs (see Section 10.5).
871. On the other hand, the Authority's results show that an EEC paying the wholesale NRO tariffs charged by Telenor to NwN would have reported positive gross margins from 1 September 2010 until 31 December 2012 (see again Section 10.4.3 above). In order to determine whether Telenor abused its dominant position in those latter months as well, it would be necessary to calculate Telenor's downstream costs and check whether the positive gross margins would have been sufficient to cover those downstream costs.
872. Given however the complexity and time-intensive nature of an analysis of Telenor's downstream costs, the Authority has considered it appropriate, in this case, to limit itself to finding a margin squeeze in respect of the wholesale NRO tariffs charged by Telenor to NwN from 1 August 2008 to 31 August 2010, i.e. the period during which the gross margin was negative.
873. As far as Ventelo is concerned, as noted in Section 10.4.3 above, the Authority's results show that an EEC paying the wholesale MVNO tariffs charged by Telenor to Ventelo would have reported negative gross margins from January 2008 to November 2010, from January 2012 to March 2012, in October 2012 and in December 2012. In the remaining months, an EEC paying the wholesale MVNO tariffs charged by Telenor to Ventelo, would have reported positive gross margins.
874. Given these results, and applying the same approach used for NwN, the Authority has limited itself, in this case, for reasons of procedural efficiency, to finding a margin squeeze in respect of the wholesale MVNO tariffs charged to Ventelo only for the period from January 2008 to November 2010.

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<sup>1094</sup> For the sake of clarity, references to month(s) here include the entirety of the month(s) in question.

875. Finally, as noted in Section 10.4.3 above, the Authority’s results show that an EEC paying the wholesale tariffs charged by Telenor to SPs would have reported negative gross margins in all months from January 2008 to December 2012. This finding in itself allows the Authority to conclude that, during that period, Telenor abused its dominant position by imposing a margin squeeze in respect of the wholesale SP tariffs, without it being necessary to consider Telenor’s downstream costs (see again section 10.4.1 above).
876. In light of the above, the Authority concludes that Telenor abused its dominant position by imposing margin squeezes in relation to:
- (a) The wholesale NRO tariffs charged to NwN, from 1 August 2008 to 31 August 2010;
  - (b) The wholesale MVNO tariffs charged to Ventelo, from 1 January 2008 to 30 November 2010; and
  - (c) The wholesale SP tariffs, from 1 January 2008 to 31 December 2012.

## 10.5 Effect on competition and consumers

### 10.5.1 Legal framework

877. The EFTA Court has held that: “*for the purposes of establishing an infringement of Article 54 EEA, it is not necessary to show that the abuse under consideration had an actual impact on the relevant markets. It is sufficient in that respect to show that the abusive conduct of the undertaking in a dominant position tends to restrict competition or, in other words, that the conduct is capable of having that effect.*”<sup>1095</sup> This is settled EU case law,<sup>1096</sup> also with regard to cases involving a margin squeeze.<sup>1097</sup> In other words, it is sufficient to show “*potential effects*” of the dominant undertaking’s behaviour.<sup>1098</sup>
878. In order therefore for a margin squeeze to be abusive within the meaning of Article 54 EEA, that practice must have an anti-competitive effect in the market, but the effect does not necessarily have to be concrete. It is sufficient to show that there is an anti-competitive effect which may potentially exclude from the market competitors which are at least as efficient as the dominant undertaking.<sup>1099</sup>

<sup>1095</sup> See judgment of 18 April 2012 in Case E-15/10 *Posten Norge* [2012] EFTA Ct. Rep. 246, paragraph 189.

<sup>1096</sup> See judgment of 17 December 2003, *British Airways*, T-219/99, EU:T:2003:343, paragraph 293 (upheld on appeal: judgment of 15 March 2007, *British Airways*, C-95/04 P, EU:C:2007:166); and judgment of 9 September 2009, *Clearstream*, T-301/04, EU:T:2009:317, paragraph 144.

<sup>1097</sup> See judgment of 29 March 2012, *Telefónica*, T-336/07, EU:T:2012:172, paragraph 268; and judgment of 13 December 2018, *Slovak Telekom*, T-851/14, EU:T:2018:929, paragraph 110.

<sup>1098</sup> See judgment of 30 May 2018 in Case E-6/17 *Fjarskipti* [2018] EFTA Ct. Rep. 78, paragraph 62; see also judgment of 6 December 2012, *AstraZeneca*, C-457/10 P, EU:C:2012:770, paragraph 112; judgment of 17 February 2011, *TeliaSonera Sverige*, C-52/09, EU:C:2011:83, paragraph 64; and judgment of 29 March 2012, *Spain v Commission*; T-398/07, EU:T:2012:173, paragraph 90.

<sup>1099</sup> See judgment of 30 May 2018 in Case E-6/17 *Fjarskipti* [2018] EFTA Ct. Rep. 78, paragraph 62; see also the judgment of 17 February 2011, *TeliaSonera Sverige*, C-52/09, EU:C:2011:83, paragraphs 64–67; and judgment of 10 July 2014, *Telefónica*, C-295/12 P, EU:C:2014:2062, paragraph 124.

879. According to the CJEU, the anti-competitive effect caused by a margin squeeze must relate to the possible barriers which the squeeze may create to the growth on the retail market of the services offered to end users and, therefore, the degree of competition in that market. Accordingly, there is an abuse where the margin squeeze reduces the margins of equally efficient competitors and is thus capable of making the entry of such competitors into the market concerned more difficult or impossible.<sup>1100</sup> The European Courts have also held that the potential anti-competitive effects of a margin squeeze usually result from the tendency of the practice to increase the entry costs of competitors and/or to delay their prospects of becoming profitable.<sup>1101</sup>
880. Further, the CJEU has held that “*the fact that the desired result, namely the exclusion of those competitors, is not ultimately achieved does not alter its categorisation as abuse within the meaning of Article 102 TFEU*”.<sup>1102</sup>
881. Article 102 TFEU and Article 54 EEA are aimed not only at practices which may cause prejudice to consumers directly, but also at those which are detrimental to an effective competition structure.<sup>1103</sup> These provisions aim at protecting the structure of the market, where the degree of competition is already weakened.<sup>1104</sup> Article 54 EEA does not require the Authority to examine specifically whether the conduct of the dominant undertaking has actually caused prejudice directly to consumers.<sup>1105</sup>
882. Indispensability of the wholesale input is not a legal requirement for finding an abusive margin squeeze.<sup>1106</sup> Indispensability may be relevant when assessing the effects of a margin squeeze.<sup>1107</sup> Where access to the supply of the wholesale product is indispensable for the sale of the retail product, the at least potentially anti-competitive effect of a margin squeeze is probable.<sup>1108</sup> Even if the wholesale input is not indispensable, a margin

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<sup>1100</sup> See judgment of 17 February 2011, *TeliaSonera Sverige*, C-52/09, EU:C:2011:83, paragraphs 62 *et seq.*, and judgment of 14 October 2010, *Deutsche Telekom*, C-280/08 P, EU:C:2010:603, paragraphs 252–253.

<sup>1101</sup> See judgment of 29 March 2012, *Telefónica*, T-336/07, EU:T:2012:172, paragraph 279.

<sup>1102</sup> See judgment of 17 February 2011, *TeliaSonera Sverige*, C-52/09, EU:C:2011:83, paragraph 65.

<sup>1103</sup> See judgment of 29 March 2012, *Telefónica*, T-336/07, EU:T:2012:172, paragraph 270; judgment of 17 February 2011, *TeliaSonera Sverige*, C-52/09, EU:C:2011:83, paragraph 24; judgment of 15 March 2007, *British Airways*, C-95/04 P, EU:C:2007:166, paragraphs 106–107; and judgment of 21 February 1973, *Europemballage and Continental Can Company*, 6/72, EU:C:1973:22, paragraph 26.

<sup>1104</sup> See judgment of 2 April 2009, *France Télécom*, C-202/07 P, EU:C:2009:214, paragraph 104 and case law cited therein.

<sup>1105</sup> See judgment of 13 December 2018, *Slovak Telekom*, T-851/14, EU:T:2018:929, paragraph 110; judgment of 27 March 2012, *Post Danmark*, C-209/10, EU:C:2012:172, paragraph 20 and the case-law cited; and judgment of 29 March 2012, *Telefónica*, T-336/07, EU:T:2012:172, paragraph 171.

<sup>1106</sup> See judgment of 17 February 2011, *TeliaSonera Sverige*, C-52/09, EU:C:2011:83, paragraphs 69–72. See also judgment of 10 July 2014, *Telefónica*, C-295/12 P, EU:C:2014:2062, paragraphs 117–118; and judgment of 13 December 2018, *Slovak Telekom*, T-851/14, EU:T:2018:929, paragraphs 95–128.

<sup>1107</sup> See judgment of 17 February 2011, *TeliaSonera Sverige*, C-52/09, EU:C:2011:83, paragraph 69.

<sup>1108</sup> *Ibidem*, paragraphs 70–71.

squeeze practice may still be capable of having anti-competitive effects on the markets concerned.<sup>1109</sup>

883. When assessing the effects of a margin squeeze practice, it is necessary to determine the level of margin squeeze of competitors at least as efficient as the dominant undertaking.<sup>1110</sup>
884. Where the gross margin is negative,<sup>1111</sup> as in the present case (see Section 10.4.5 above), the CJEU has clearly stated that an effect which is at least potentially exclusionary is probable. This is because in such a situation, competitors of the dominant undertaking, even if they are as efficient, or even more efficient compared with it, would be compelled to sell at a loss.<sup>1112</sup>
885. If, on the other hand, the gross margin remains positive, it must then be demonstrated that the application of that pricing practice was, by reason, for example, of reduced profitability, likely to have the consequence that it would be at least more difficult for the operators concerned to trade on the market concerned.<sup>1113</sup>
886. In the next section, the Authority shows that Telenor's margin squeeze practices were capable of having anti-competitive effects, as required by the case law,<sup>1114</sup> i.e. they were capable of making more difficult, or impossible, the entry or activity of as-efficient competitors on the market concerned.<sup>1115</sup>

## ***10.5.2 Potential anti-competitive effects of Telenor's conduct***

### ***10.5.2.1 Equally efficient competitors (would have) suffered negative gross margins***

887. In Section 10.4 above, the Authority calculated the margins that an equally efficient competitor of Telenor would have earned if it had paid the same wholesale prices as those charged by Telenor to its wholesale customers during the Period under Consideration and it replicated Telenor's residential stand-alone MBB portfolio in the downstream market. On the basis of those calculations, the Authority concluded that:

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<sup>1109</sup> Ibidem, paragraph 72.

<sup>1110</sup> Ibidem, paragraph 73.

<sup>1111</sup> I.e. the relevant downstream revenues are lower than the upstream costs.

<sup>1112</sup> See judgment of 30 May 2018 in Case E-6/17 *Fjaraskipti* [2018] EFTA Ct. Rep. 78, paragraph 66. See also judgment of 17 February 2011, *TeliaSonera Sverige*, C-52/09, EU:C:2011:83, paragraph 73.

<sup>1113</sup> See judgment of 17 February 2011, *TeliaSonera Sverige*, C-52/09, EU:C:2011:83, paragraph 74.

<sup>1114</sup> See paragraph 877 above.

<sup>1115</sup> See judgment of 29 March 2012, *Telefónica*, T-336/07, EU:T:2012:172, paragraph 271; judgment of 17 February 2011, *TeliaSonera Sverige*, C-52/09, EU:C:2011:83, paragraphs 63–64; and judgment of 14 October 2010, *Deutsche Telekom*, C-280/08 P, EU:C:2010:603, paragraphs 177 and 253.

- (a) If it had to pay the wholesale NRO tariffs charged by Telenor to NwN, an as-efficient competitor of Telenor would have earned negative gross margins<sup>1116</sup> in all months from 1 August 2008 to 31 August 2010;
- (b) If it had to pay the wholesale MVNO tariffs charged by Telenor to Ventelo, an as-efficient competitor of Telenor would have earned negative gross margins from 1 January 2008 to 30 November 2010;<sup>1117</sup>
- (c) If it had to pay the wholesale tariffs charged by Telenor to SPs, an as-efficient competitor of Telenor would have earned negative gross margins during the entire period from 1 January 2008 to 31 December 2012.

888. Therefore, Telenor's wholesale customers were (or would have been) compelled to sell residential stand-alone MBB services at a loss, even if they were as efficient as Telenor. The Authority recalls that the negative margins in question are negative *gross* margins. In other words, an equally efficient competitor would be loss-making even before taking its product-specific retail costs into account. As set out in paragraph 867 above, given that the gross margins are negative, the Authority has not considered the relevant downstream costs in any detail. It observes however that the inclusion of any such costs would only make the losses of as-efficient competitors worse. Such negative gross margins were present (or would have applied) during the entire Period under Consideration based on the wholesale prices charged by Telenor to SPs, and during the major part of the Period under Consideration based on the wholesale prices charged by Telenor to the NRO NwN and the MVNO Ventelo.

889. The Authority recalls that the calculation of the gross margin is based on Telenor's retail prices/revenues, since the Authority applies an EEC test. This is therefore a conservative approach, since alternative operators (such as Telenor's wholesale customers), as challengers, may need to apply cheaper retail prices than the incumbent operator (Telenor in the present case) in order to convince end users to switch from the established incumbent to the new entrant.<sup>1118</sup> In order to attract retail customers, Telenor's wholesale customers may have had to offer better retail terms than Telenor, which would have resulted in even larger negative gross margins and therefore even greater losses when offering residential stand-alone MBB.

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<sup>1116</sup> I.e. the wholesale costs would have been higher than the retail revenues for residential stand-alone MBB services.

<sup>1117</sup> The Authority notes that this would also have been the case from January 2012 to March 2012 (both inclusive), in October 2012 and in December 2012. However, as set out in paragraph 874 above, the Authority has limited itself, in this case, to finding a margin squeeze in respect of Ventelo only for the period from 1 January 2008 to 30 November 2010.

<sup>1118</sup> This was in fact the case in *Deutsche Telekom*, as observed by the GCEU in its judgment of 10 April 2008, T-271/03, EU:T:2008:101, paragraph 202: "*In any event, since the applicant significantly lowered its telephone call charges in the period covered by the contested decision [...], it is conceivable that competitors did not even have the economic opportunity to offset charges suggested by the applicant. In fact, the competitors, already at a competitive disadvantage by comparison with the applicant in relation to local network access, had to apply even lower call charges than the applicant in order to encourage potential customers to discontinue their subscription to the applicant and to subscribe to them instead.*"

890. The Authority recalls further that, as shown in Section 10.4 above, equally efficient competitors faced or would have faced such negative gross margins *at each level* of wholesale access to Telenor's mobile network. This was the case during the entire Period under Consideration (based on the wholesale tariffs charged by Telenor to SPs) or the major part of it (based on the wholesale tariffs charged by Telenor to NROs or MVNOs). In mobile communications markets, the purpose of wholesale access at SP, MVNO and NRO levels is to facilitate entry and expansion by mobile communications providers of differing size and infrastructure profiles.<sup>1119</sup> By making use of such layered wholesale access to a mobile network, SPs, MVNOs and NROs can deliver mobile communications services and thus have the opportunity to grow a critical customer base. This may in turn facilitate further investments and the development of progressively stronger competitors over time.<sup>1120</sup>
891. Indeed, each access level offers a potential source of competitive discipline in the relevant retail market, and possibly also in the relevant wholesale market over time. While NROs incur the largest investments and present a more credible source of infrastructure-based competition, Nkom has also recognised that, while MVNOs or SPs may not always ascend the ladder of investment to become fully-fledged infrastructure owners, they nonetheless have independent competitive significance. First, MVNOs and SPs can contribute direct competitive pressure on price and non-price service features, including stimulating innovation through increased product diversity at service level.<sup>1121</sup> Second, given the absence of a fully-established third nationwide mobile network in Norway (see paragraph 60 above), Nkom has increasingly recognised the potential for MVNOs and SPs to supply (wholesale) traffic to a third mobile network, thus also contributing to sustainable competition in the relevant retail and wholesale markets over the longer term.<sup>1122</sup>

<sup>1119</sup> Nkom's 2006, 2010, 2016 and 2020 SMP Decisions have consistently recognised the value of facilitating gradual investments through access to established mobile infrastructure at different levels. See Nkom's 2020 SMP Decision, paragraph 76; Nkom's 2016 SMP Decision, paragraph 71; Nkom's 2010 SMP Decision, paragraph 64; Nkom's 2006 SMP Decision, section 7.3.

<sup>1120</sup> As held by the GCEU, all levels of the ladder should be accessible since "*the process that enables alternative operators to invest gradually in their own infrastructure can constitute a viable strategy only where there is no margin squeeze practice at the different levels of the ladder*". See judgment of 29 March 2012, *Telefónica*, T-336/07, EU:T:2012:172, paragraph 196.

<sup>1121</sup> The European Commission has also recognised the value of the competitive role played by access seekers in other mobile markets. For example, in paragraph 46 of Commission Decision of 1 March 2010 in Case COMP/M.5650 – *T-Mobile/Orange*, the Commission noted in respect of the broader retail market for mobile communications that: "*In the UK retail market, MVNOs play a significant role. (...) MVNOs not only compete on price and consumer services with their host networks, but they also stimulate competition by introducing innovative business models.*"

<sup>1122</sup> Nkom's growing recognition of the competitive role played by MVNOs and SPs is reflected in a corresponding evolution in the regulatory emphasis/principles underpinning its SMP Decisions. While principle 3 (which seeks to support infrastructure-based competition; see footnote 124 above) was the main principle governing Nkom's choice of remedies in its 2006, 2010, 2016 and 2020 SMP Decisions, the latter two SMP Decisions also placed a somewhat greater emphasis on principle 2 (which foresees the protection of consumer interests where infrastructure duplication is not feasible, e.g. through service-based competition; see paragraph 118 above). See Section 5.2 above.

892. Telenor's conduct was, therefore, likely to hinder, or was at least capable of hindering as-efficient competitors across all three access levels from entering or expanding in an evolving and fast-growing market. In the Authority's view, the negative gross margins potentially had a significant impact on the ability of NROs, MVNOs and SPs to contribute important competitive pressure in the residential stand-alone MBB market during the Period under Consideration, as well as to contribute to sustainable competition in both the relevant retail and wholesale markets over the longer term.
893. The importance of the MBB market was confirmed by internal Telenor documents, where Telenor referred to the MBB market as a "must-win battle",<sup>1123</sup> as displaying "significant growth", and as "the main area for new establishment in Norway".<sup>1124</sup> It is also consistent with statements from NwN, which stated in a letter to Telenor in June 2009: "*Telenor's wholesale prices result in a margin squeeze situation for Network Norway. This is unsustainable for Network Norway. As the market for mobile broadband services is in an important growth phase, such a situation will mean that Network Norway cannot compete for new consumers.*"<sup>1125</sup>
894. On the basis of the above, the Authority takes the view that Telenor's pricing practices were likely to hinder or were at least capable of hindering the ability of actual or potential competitors at least as efficient as Telenor itself to trade on the retail market for the provision of stand-alone MBB services to residential customers in Norway. The fact that equally efficient competitors, at all levels of wholesale access to Telenor's mobile network, would have been loss-making even before taking product-specific retail costs into account reveals the exclusionary potential of Telenor's pricing practice. The Authority recalls that, according to case law of the European Courts, when, as in the present case, even the gross margin is negative, an effect which is at least potentially exclusionary is probable.<sup>1126</sup>
895. The Authority's finding of negative gross margins is therefore sufficient to conclude that an effect which was at least potentially exclusionary is probable. This conclusion is further confirmed by competitor statements and the fact that Telenor's wholesale customers could not avoid the margin squeeze by switching to another wholesale supplier, as set out in the sections below.
- 10.5.2.2 *Competitor statements further confirm that the margin squeeze was capable of having anti-competitive effects*
896. Statements from NwN support the Authority's conclusion that the margin squeeze practices reduced the ability of Telenor's wholesale customers to compete in the relevant downstream market.

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<sup>1123</sup> See paragraph 179 above.

<sup>1124</sup> See footnote 237 above.

<sup>1125</sup> See footnote 1129 below.

<sup>1126</sup> See paragraph 884 and footnote 1112 above.

897. The Authority refers to the following statement made by Telia, on behalf of NwN,<sup>1127</sup> with regard to the Period under Consideration:<sup>1128</sup>

*“From the perspective that Network Norway had in the relevant period, the main factor restricting Network Norway from offering MBB services was the national roaming tariffs [i.e. the wholesale prices charged by Telenor to NwN] which prevented Network Norway from being able to provide competitive prices for MBB due to a margin squeeze. Consequently, Network Norway did not seek to expand its MBB offering.”*

898. As reported by the Norwegian NCA in its Decision V2018-20 addressed to Telenor, the assessment made by NwN in 2009, i.e. during the first part of the Period under Consideration, was the same. In its letter of 9 June 2009 to Telenor in relation to the negotiation of a revised NR agreement, NwN stated that Telenor’s wholesale prices in combination with its retail prices for data resulted in a margin squeeze:<sup>1129</sup>

*“The data prices in the [retail] market have decreased so much that Telenor’s wholesale prices are significantly higher than the corresponding service from Telenor in the retail market. Telenor’s wholesale prices result in a margin squeeze situation for Network Norway. This is unsustainable for Network Norway. As the market for mobile broadband services is in an important growth phase, such a situation will mean that Network Norway cannot compete for new consumers.”*

899. NwN, Telenor’s largest customer, therefore put Telenor on notice of the impact that the pricing was having on its business.<sup>1130</sup> Indeed, at this time (in or around June 2009) Telenor was aware that its pricing practices at least potentially raised competition concerns. This can be seen from paragraphs 281–282 of the Norwegian NCA’s Decision V2018-20, which provide:<sup>1131</sup>

<sup>1127</sup> As explained in paragraphs 74 and 77 above, in 2011, NwN was acquired by Tele2 and the latter was acquired by Telia in 2015.

<sup>1128</sup> See Document No 1075917, letter from Telia to the Authority of 30 August 2016, Section 2.2, where Telia also notes and agrees with the Authority’s definition of the relevant market as MBB services sold to residential customers.

<sup>1129</sup> See the Norwegian NCA’s Decision V2018-20, paragraph 275; translation by the Authority of: *“Dataprisene i markedet har falt så mye at Telenors grossistpriser er betydelig høyere enn tilsvarende tjeneste fra Telenor i sluttbrukermarkedet. Telenors grossistpriser medfører en prisklemmesituasjon for Network Norway. Dette er uholdbart for Network Norway. Siden markedet for mobile bredbåndstjenester er inne i en viktig vekstfase vil en slik situasjon medføre at Network Norway ikke kan være med på å konkurrere om nye kunder.”*

<sup>1130</sup> The Authority observes that Telenor at least theoretically concedes that NwN could have been more dedicated towards residential MBB with better margins; see Reply to the SO, paragraph 511.

<sup>1131</sup> See Document No 1075916, paragraphs 281–282; the Authority’s translation of the following extract: *“I et saksfremlegg til ledermøtet i grossistavdelingen i Telenor 22. juni 2009 fremkommer det at Telenor gjennomførte kvartalsvise marginberegninger av sine grossistpriser. Bakgrunnen for dette var angitt som følger: ‘Formålet er å sikre at tilgangsfaktorene har tilstrekkelige marginer, dette for ikke å komme i konflikt med konkurranseloven § 11 om utilbørlig utnyttelse av dominerende stilling.’ Telenors marginberegninger viste at prisene til tjenesteleverandører, MVNO-er og Network Norway måtte justeres ned for å unngå å sette disse i en marginskvis. På denne bakgrunn ble det i ledermøtet foreslått å redusere dataprisene for tjenesteleverandører og MVNO-er (...) fra og med 1. juli 2009. For Network Norway ble det foreslått prisreduksjoner for data, og at disse prisreduksjonene skulle gjøres gjeldende fra og med 1. mai 2009.”*

*“(281) From a document presented in the management meeting of Telenor’s wholesale department on 22 June 2009, it appears that Telenor conducted quarterly margin calculations based on its wholesale prices. The aim was to ‘ensure that the wholesale customers have sufficient margins, in order not to violate Article 11 of the Competition Act on abuse of dominant position’.*

*(282) Telenor’s calculations of margins show that the prices to SPs, MVNOs and Network Norway needed to be adjusted in order to avoid a margin squeeze. Against this background, it was proposed in the management meeting to reduce the prices on data offered to SPs, MVNOs (...) as from 1 July 2009. For Network Norway, it was proposed to offer reductions in prices on data as from 1 May 2009.”*

900. Notwithstanding the above, Telenor continued to apply pricing terms to NwN which (would have) resulted in an equally efficient competitor having negative gross margins on the relevant retail market until and including August 2010 (see Section 10.4 above).<sup>1132</sup>
901. Finally, NwN has explained that the spread between the wholesale tariff and retail revenues resulted in it employing a passive commercial strategy in relation to MBB services.<sup>1133</sup>

*“Due to the wholesale tariffs for data (national roaming), the average usage volumes/revenue and payment of commission forced Network Norway to be very careful in marketing MBB. As a result, Network Norway focused on mobile telephony services with higher ARPU potential and offered the MBB portfolio strictly as an add-on service to those subscribers that required a MBB (i.e. a very defensive and reactive market offering). Hence Network Norway did not proactively market MBB, nor did Network Norway spend market funding on adverts or develop a clear strategy tailored specifically for the MBB product segment. The result is a very low market share in the MBB segment.”*

#### 10.5.2.3 Telenor’s wholesale customers could not avoid being margin squeezed by switching to another wholesale supplier

902. The Authority is not required to show that Telenor’s wholesale input (i.e. wholesale access and origination services on its public mobile telephone network in Norway) was

<sup>1132</sup> Telenor maintains (see footnote 1030 above) that if NwN had accepted Telenor’s TPDP offer made in the autumn of 2009, with proposed effect from 1 November 2009, the use by NwN of such TPDP would have avoided any margin squeeze from the latter date. As explained above, the Authority considers that, for reasons of legal certainty, the margin squeeze test should only be applied to the agreed contractual tariffs charged to NwN and that, in any event, the use of the TPDP, modelled correctly, would still have resulted in a margin squeeze until and including August 2010 (see paragraphs 825–839 above).

<sup>1133</sup> Document No 788751, reply by Tele2 and NwN of 9 May 2014 to the Authority’s request for information dated 28 March 2014, non-confidential version, page 7 (reply to the following question 3.3: “Please describe the commercial strategies that were pursued by your company in respect of dedicated MBB services during the relevant period, e.g. in relation to any MBB products/services which your company offered or considered offering, any focus on particular customer segments, level of marketing expenditures or investments, etc.”).

indispensable in order to show anti-competitive effects.<sup>1134</sup> The Authority finds, however, that Telenor's affected wholesale customers had no effective and/or economically viable alternative to its wholesale input during the Period under Consideration. Additionally, switching costs limited the scope and incentives for these wholesale customers to substitute away from Telenor's wholesale input in a timely manner.

903. Therefore, Telenor's wholesale customers could not in any meaningful way avoid the negative gross margins by simply switching to an alternative wholesale supplier. This further confirms the Authority's conclusion that, in light of the negative gross margins and the competitor statements set out above, anti-competitive effects were probable. The reasons for this are as follows.
904. First, as mentioned above, there were no effective and/or economically viable alternatives for Telenor's input.
905. As described in Section 4.2.1.2.3 above and in particular paragraph 75, the coverage of Mobile Norway's network was limited during the main part of the Period under Consideration. For example, Nkom notes that Mobile Norway had a population coverage of only 42% at the beginning of 2012.<sup>1135</sup> Consequently, Mobile Norway, and its parents NwN and Tele2, could only sell nationwide wholesale access that was based in large part on (resale of) either Telenor's or Telia's wholesale input. The wholesale prices that Mobile Norway (and its parents NwN and Tele2) could offer potential wholesale customers were therefore to a significant degree affected by the unfavourable wholesale prices offered by either Telenor or Telia. Mobile Norway, and its parents NwN and Tele2, were thus not an effective and/or economically viable alternative as a supplier of the relevant wholesale input. This is further confirmed by the fact that neither Mobile Norway nor Tele2 had any external wholesale customers and NwN only had four small SP wholesale customers during the Period under Consideration.<sup>1136</sup> In addition, as set out in paragraph 504 above, NwN's wholesale agreement with Telenor made it more difficult for NwN to provide access to MVNOs, because, in that case, Telenor would be entitled to renegotiate its wholesale prices, which would impact on the ability of NwN to negotiate freely with MVNOs for such business.
906. As described in Section 4.2.1.2.2 above, ICE was also not an effective and/or economically viable alternative in the wholesale market. Its network did not have nationwide coverage<sup>1137</sup> and in addition it offered only data traffic on mobile networks, as its network was not compatible with mobile phones.<sup>1138</sup> Telenor's discount pricing

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<sup>1134</sup> See Section 10.5.1 above.

<sup>1135</sup> See Nkom's draft 2014 Market Analysis, paragraph 434 (and see footnote 660 above). As a consequence, even the parents of Mobile Norway (NwN and Tele2) needed to enter into wholesale agreements with Telenor or Telia.

<sup>1136</sup> See paragraph 504 above.

<sup>1137</sup> See paragraph 71 above.

<sup>1138</sup> See paragraph 72 above. Consequently, a wholesale customer that sourced wholesale data access from ICE would still have had to buy mobile access and origination services from either Telenor or Telia if it wanted to

structure (which was triggered only by voice minutes purchased but which would then apply retroactively across all traffic categories, including data<sup>1139</sup>) meant that wholesale customers would have lost discounts of up to [0-20]% on data traffic switched to ICE's network.<sup>1140</sup> Further, the fact that ICE was only a marginal supplier on the relevant wholesale market during the Period under Consideration<sup>1141</sup> also suggests that it was not an effective and/or economically viable alternative to Telenor's wholesale input.

907. During the Period under Consideration, Telia was the only competitor that had a nationwide network coverage and offered a complete range of services (including wholesale inputs for mobile calls).
908. However, for the reasons explained in paragraph 522 above, in practice Telia had limited incentives to compete with Telenor on the relevant wholesale market and to offer attractive terms to wholesale customers seeking to avoid Telenor's margin squeeze practices.
909. This can be seen, for example, in an internal e-mail sent in May 2009 to Telenor's CEO during the negotiation of a revised NR agreement with NwN, by a Telenor Director, who stated:<sup>1142</sup>

*"I don't think Netcom [i.e. Telia] will offer NwN prices anywhere near the prices they [i.e. NwN] are asking for. [...] In our opinion, it is not in our interest to change the current agreement [with NwN]."*

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provide mobile voice services as well. The fact of having to deal with two wholesale suppliers would have entailed an additional administrative burden and costs.

<sup>1139</sup> See paragraph 801 above.

<sup>1140</sup> See, for example, Document No 657260 – EES 27, National Roaming Agreement between Telenor and NwN, dated 3 April 2008, Annex 5, Chapter 2. See also paragraph 801 above.

<sup>1141</sup> It had only a very limited number of wholesale customers during the Period under Consideration: see paragraph 508 above.

<sup>1142</sup> E-mail from the Division Director of Telenor's Wholesale and Regulatory Division to Telenor's CEO of 29 May 2009; translation by the Authority from the Norwegian version: "*Jeg tror heller ikke NetCom vil gi NwN priser i nærheten av det de ber om. [...] Alt i alt mener vi derfor at vi er best tjent med å ikke å gjøre endringer i avtalen på disse områdene.*"; see the Norwegian NCA's Decision V2018-20, paragraph 271. In Section 5.2.3 of its Reply to the LoF, Telenor claims that this merely shows that it did not believe that Telia would meet NwN's unrealistic expectations/demands and that it does not say anything about the incentives access seekers in general had to switch supplier, nor their ability to do so. Telenor adds that several access seekers, including both NwN and Tele2 in 2007/2008, did switch supplier. The Authority disagrees. It has shown in Section 9.2.2.3 above that switching was limited during the Period under Consideration and that the switching by Tele2 and NwN in 2007/early 2008 was not a sign of effective competition between Telenor and Telia. The Authority considers that this episode rather shows that Telenor was not materially constrained by Telia. As set out in paragraphs 515 and 520 above, Telenor initially did not even want to compete with Telia to have NwN as a wholesale customer. It initially simply refused NwN's access request.

910. An internal NwN note, sent to its board, stated the following regarding these negotiations:<sup>1143</sup>

*“Netcom [i.e. Telia] will not offer us conditions we can use to play them [i.e. Telenor and Telia] out against each other in order to receive lower prices from Telenor.”*

911. The Authority recalls that, by letter of 6 June 2009, NwN had informed Telenor that Telenor’s terms resulted in a margin squeeze (see paragraphs 898 and 899 above). The above evidence indicates that, despite this, NwN could not obtain sufficiently better terms from Telia to make it worth switching.<sup>1144</sup> The Authority considers that for NwN, Telia was therefore not an economically viable alternative.
912. Given Telia’s limited incentives to offer competitive wholesale terms, the Authority considers more generally that Telenor’s affected wholesale customers would not have obtained wholesale prices from Telia that would have allowed them to avoid Telenor’s margin squeeze practices. This is shown by the fact that, based on an EEC test, Telia’s wholesale customers also earned or would have earned negative margins when providing stand-alone MBB services to residential customers during the Period under Consideration.<sup>1145</sup>
913. For the above reasons, Telia was not an economically viable alternative for Telenor’s wholesale customers. Switching to Telia to avoid negative gross margins when providing residential stand-alone MBB services was therefore not an option for Telenor’s affected wholesale customers.
914. MVNOs and SPs could only resell wholesale access to a mobile network, as they had no network of their own. If re-selling access bought from Telenor or Telia, the wholesale prices that MVNOs or SPs could offer wholesale customers were or would have been significantly affected by the unfavourable wholesale prices<sup>1146</sup> offered by either Telenor or Telia. This would also have been the case had MVNOs and SPs resold access bought from Mobile Norway and ICE. Due to the lack of nationwide coverage of the Mobile Norway and ICE networks, if reselling such wholesale access bought from Mobile Norway and/or ICE, MVNOs and SPs would have had to supplement this in large part by buying and therefore on-selling wholesale access from Telenor or Telia. This supplementary access would have again been affected by the unfavourable terms applied by Telenor and Telia. In any of these cases, therefore, MVNOs and SPs were not effective and economically viable alternatives as suppliers of the relevant wholesale input.

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<sup>1143</sup> Translation by the Authority from Norwegian: *“Dette betyr at Netcom ikke vil være en kommersiell part som sikrer oss bedre priser fra Telenor ved å spille de opp mot hverandre i forhandlinger.”* See the Norwegian NCA’s Decision V2018-20, paragraph 279.

<sup>1144</sup> The Authority recalls that under its contract with Telenor, NwN was suffering negative margins (see paragraphs 870–872 above).

<sup>1145</sup> See paragraph 373 above and Annex 2 to this Decision.

<sup>1146</sup> Resulting in each case in a margin squeeze by reference to the prevailing retail prices for residential stand-alone MBB services (see Section 10.4 and paragraph 373 above).

915. Second, as described above,<sup>1147</sup> even if there were effective and/or economically viable alternatives for Telenor's wholesale input, which the Authority does not believe to have been the case during the Period under Consideration, switching costs limited the scope and incentives for the affected wholesale customers to substitute away from Telenor's wholesale input in a timely manner.
916. These switching costs stemmed *inter alia* from long contractual periods, exclusivity clauses with penalties, and minimum purchasing obligations in the wholesale contracts with Telenor.
917. In this regard, the Authority recalls that NwN could not, during the entire Period under Consideration, purchase wholesale access from Telia, the only other MNO with a nationwide network, without terminating its wholesale agreement with Telenor and moving its entire wholesale purchases to Telia. This was due to a clause in its agreement with Telenor, which prevented it from obtaining wholesale access from another operator with nationwide coverage.<sup>1148</sup> In addition, NwN was tied to Telenor in the form of long contractual periods in its wholesale agreements, exclusivity clauses with sizeable penalties, and minimum purchasing obligations<sup>1149</sup> (see paragraphs 536–537 above). In the context of switching costs, Telenor accepts that “*Network Norway and Tele2 ... were both obligated by relative[ly] long term contracts with Telenor and Telia respectively and could not easily switch supplier during their contract terms*”.<sup>1150</sup> In an internal memorandum of 25 March 2010, Telenor stated that, given NwN's contractual

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<sup>1147</sup> See paragraphs 528–539 above.

<sup>1148</sup> Document No 657260 – EES 27, National Roaming Agreement between Telenor and NwN of 3 April 2008, Clause 1.3(e): “*Network Norway shall not have an agreement for national roaming for GSM or UMTS access with nationwide coverage through another network operator in Norway.*”

<sup>1149</sup> Document No 657260 – EES 27, National Roaming Agreement between Telenor and NwN of 3 April 2008, Clause 13.2; Document No 657260 – EES 30, Additional agreement to the National Roaming Agreement dated 2 September 2009, Clause 4, and Document No 657260 – EES 28, Additional agreement to the National Roaming Agreement dated 18 August 2010, Clause 11. The minimum purchase obligation was introduced in the additional agreement to the NRA agreement dated 2 September 2009 (Document No 657260 EES – 30, Clauses 2 and 3); see also Document No 657260 – EES 28, additional agreement 2 to the NRA agreement dated 18 August 2010, Clause 5. See further Document No 1075917, Letter from Telia – also on behalf of NwN as its legal predecessor – to the Authority of 30 August 2016, Section 2.2, page 6: “*From the perspective that Network Norway had in the relevant period, wholesale customers could have switched from Telenor's network to Telia's network, in theory. However, this possibility was limited by the terms of the national roaming agreements. Network Norway's national roaming agreements in 2008, 2009 and 2010 had a fixed term of 4 years and a substantial purchase obligation, which in combination prevented Network Norway from switching to Telia's network before the fixed contract term expired. Also, the exclusivity clause in the same national roaming agreements prevented Network Norway and other group companies from establishing a parallel national roaming agreement during the contract term. Consequently, should Network Norway have tried to switch to Telia's network prior to the fixed contract term this would entail a substantial risk for a claim from Telenor. This risk was demonstrated when Tele2 AB acquired Network Norway in 2012, and Telenor claimed MNOK 160. The basis of the claim was that Telenor alleged that Network Norway was in breach of the exclusivity clause since Tele2 Norge AS had an existing wholesale agreement with Telia.*”

<sup>1150</sup> Reply to the SSO, paragraph 247.

obligations and the penalties it would incur in case of breach, it was unlikely that it would be able to enter into a NR agreement with another operator.<sup>1151</sup>

918. Ventelo was also tied into a 5-year contract with Telenor,<sup>1152</sup> which included penalty clauses<sup>1153</sup> for early termination and a clause prohibiting double roaming on the same SIM cards.<sup>1154</sup> This limited Ventelo's ability to switch.
919. The contractual clauses with Telenor therefore resulted in significant switching costs for NwN and Ventelo, irrespective of the additional switching costs set out in the next paragraphs below.
920. As described in paragraphs 531–534 above, Telenor's network was perceived by end users as superior to that of Telia (the only other MNO with a nationwide network), and certainly also to those of operators offering only limited coverage or services, i.e. Mobile Norway and ICE. This difference in (at least perceived) network quality reinforced customer loyalty and further increased the switching costs of Telenor's wholesale customers.<sup>1155</sup>
921. Finally, on the issue of switching costs, as explained in paragraph 539 above, SPs faced an additional migration cost, i.e. the need to change SIM cards or to issue new devices with embedded SIMs. In addition to the specific cost of the SIM, this entailed administrative costs and could have resulted in customer losses.<sup>1156</sup>
922. The Authority's finding that Telenor's wholesale customers could not avoid the margin squeeze practices by switching to another wholesaler is also confirmed by Telenor's wholesale SP-customer Hello.
923. In particular, as also set out in footnote 753 above, Hello explained that: "*Telenor is a dominant player in the Norwegian market, and seems to be perceived as the preferred choice by a majority of mobile end-users in the Norwegian market, both with regards to quality, coverage and other factors. This means that for a small reseller like Hello, it is virtually impossible to operate without Telenor.*"<sup>1157</sup> In the Authority's view, this confirms that, although Hello also had wholesale agreements with Telia and ICE until 1

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<sup>1151</sup> Document No 657407 – CJO 85, memorandum of 25 March 2010 from the Division Director of Telenor's Wholesale and Regulatory Division, page 2/2 (see footnote 726 above).

<sup>1152</sup> See Document No 657260 – EES 39, MVNO Roaming Agreement between Telenor and Ventelo, dated 20 October 2005, Clause 13.1.

<sup>1153</sup> See Document No 657260 – EES 39, MVNO Roaming Agreement between Telenor and Ventelo, dated 20 October 2005, Clause 8.

<sup>1154</sup> See Document No 657260 – EES 39, MVNO Roaming Agreement between Telenor and Ventelo, dated 20 October 2005, Clauses 1.3(e) and 13.3.

<sup>1155</sup> See paragraphs 531–534 above.

<sup>1156</sup> See paragraph 539 above.

<sup>1157</sup> See Document No 786244, Hello's reply of 5 May 2014 to the Authority's request for information dated 28 March 2014, reply to question 6.1 on page 4.

June 2012,<sup>1158</sup> this was not an economically viable option to avoid the impact of Telenor's margin squeeze.

924. Based on the factors explained in paragraphs 915–921 above, the Authority concludes that, during the Period under Consideration, switching costs limited the scope and incentives for the affected wholesale customers to substitute away from Telenor's wholesale input in a timely manner.

#### 10.5.2.4 Conclusion

925. In conclusion, the Authority considers that, given its findings of negative gross margins in the present case, the above margin squeeze practices (see Section 10.4 above) were likely to hinder the ability of actual or potential competitors at least as efficient as Telenor itself to trade on the retail market for the provision of stand-alone MBB services to residential customers in Norway. This is further confirmed by competitor statements and the inability of affected customers to switch to alternative suppliers. In any event, for the reasons set out in Sections 10.5.2.1, 10.5.2.2 and 10.5.2.3 above, the margin squeeze practices were at least capable of having anti-competitive effects, by making it more difficult for as-efficient competitors to trade on the market concerned.

#### 10.5.2.5 Telenor's arguments concerning the lack of potential or actual effects

926. Telenor agrees with the Authority that the legal test for finding a margin squeeze in violation of Article 54 EEA is that "*it is sufficient to demonstrate that there is an anti-competitive effect which may potentially exclude competitors who are at least as efficient as the dominant undertaking*".<sup>1159</sup> However, it argues that its pricing policy was not

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<sup>1158</sup> Hello entered into an exclusivity agreement with Telenor with effect from 1 June 2012 onwards, which prevented it from having parallel agreements; see Document No 786244, Hello's reply of 5 May 2014 to the Authority's request for information of 28 March 2014, Section 6.1: "*Hello would have preferred to have multiple wholesale access/origination providers, for several reasons (some customers prefer another network, multiple operators would have given Hello a better position in its price negotiations, etc.). Unfortunately, Telenor has made the absolute requirement that Hello must buy mobile origination from Telenor exclusively to obtain the wholesale prices Telenor is currently offering Hello. Consequently, under the Telenor contract addition signed by Hello in August 2012 Hello had to migrate its end-users using NetCom's (TeliaSonera's) network to Telenor's network.*" and Section 6.2.c: "*M2M and MBB prices are stated in Hello's contract with Telenor, and the exclusivity clause has made it impossible to purchase/be given discounts from other operators.*" Hello's wholesale contract with Telenor was signed in August 2012, but was effective from 1 June 2012 (see Section 6.3.a of Hello's reply).

<sup>1159</sup> See Reply to the SO, paragraph 439.

capable of having any potential or actual effect on competition, for the reasons considered below.

#### 10.5.2.5.1 *Telenor's claim that there was no likelihood of exclusion*

927. According to Telenor, there was no likelihood of exclusion,<sup>1160</sup> notwithstanding the existence of negative margins in some years with respect to residential stand-alone MBB services, for two reasons.<sup>1161</sup>

##### 10.5.2.5.1.1 Alleged availability of alternative sources of supply

928. First, while Telenor agrees that indispensability of the wholesale input is not a legal requirement for finding an abusive margin squeeze,<sup>1162</sup> it claims that there were several alternatives for its wholesale mobile access input and that, accordingly, there was no likelihood of exclusion.<sup>1163</sup>

929. According to Telenor, Telia was not capacity-constrained and was a good alternative as a supplier of wholesale mobile access.<sup>1164</sup> This is allegedly shown by the fact that Telia had a number of wholesale agreements with customers, including Tele2, seeking to serve the residential segment. Moreover, Telenor claims that Telia had strong incentives to supply wholesale mobile access, given the absence of capacity constraints. As evidence of lack of indispensability of Telenor's wholesale input, Telenor states that it had competed strongly with Telia to supply wholesale access to Tele2 and NwN on a number of occasions.

930. Similarly, in Telenor's view, there was strong competition at the wholesale level to supply other MVNOs and SPs.<sup>1165</sup> Telenor claims that MVNOs and SPs could buy wholesale mobile access from other suppliers, apart from Telenor and Telia, i.e. Mobile Norway (NwN and Tele2), ICE or other MVNOs or SPs.

931. Further, Telenor claims that switching costs would not have been significant barriers to switching wholesale supplier.<sup>1166</sup> Moreover, with a few exceptions,<sup>1167</sup> Telenor claims

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<sup>1160</sup> See, in particular, Reply to the SO, Section 5.5 and Annex 14 of the Reply to the SO, Section 5.

<sup>1161</sup> See, in particular, Reply to the SO, Section 5.5; Annex 14 of the Reply to the SO, Section 5; and Reply to the SSO, Section 6.3.3.

<sup>1162</sup> See judgment of 17 February 2011, *TeliaSonera Sverige*, C-52/09, EU:C:2011:83, paragraphs 69–72. See also judgment of 13 December 2018, *Slovak Telekom*, T-851/14, EU:T:2018:929, paragraphs 95–128, and see Reply to the SO, paragraph 458.

<sup>1163</sup> See, in particular, Reply to the SO, Section 5.5.6; Annex 14 of the Reply to the SO, Section 5.1; and Reply to the SSO, Section 6.3.3.

<sup>1164</sup> See Annex 14 of the Reply to the SO, Section 5.1.2 and 5.1.3.

<sup>1165</sup> Annex 14 to the Reply to the SO, Section 5.1.5.

<sup>1166</sup> See Reply to the SO, paragraph 339, and Reply to the SSO, paragraph 246.

<sup>1167</sup> According to Telenor, exclusivity clauses precluding parallel wholesale agreements were rare. Notable exceptions, in the case of Telenor, were agreements with NwN (which had an exclusivity clause with Telenor during the entire Period under Consideration), Ventelo (from November 2010 onwards) and Hello (from June

that wholesale customers had the possibility to have (and did have) parallel wholesale agreements (i.e. agreements with multiple suppliers at the same time).

932. Telenor also claims that the volatility of market shares on the merchant market (i.e. excluding self-supply) at the wholesale level during the Period under Consideration illustrates the lack of indispensability of Telenor as a supplier of wholesale mobile access.<sup>1168</sup>
933. The Authority first recalls that it is not necessary, for a finding of a margin squeeze, to show that Telenor's wholesale input was indispensable.<sup>1169</sup> Moreover, the Authority has shown in Section 10.5.2.3 above that, in practice, there were no effective and/or economically viable alternatives to Telenor's wholesale input.
934. Contrary to what Telenor claims, it has been shown above that the affected wholesale customers faced significant switching costs (due to Telenor's perceived superior network quality and coverage and e.g. contractual provisions establishing minimum volume purchases and exclusivity requirements, and, in the case of SPs, costs related to SIM-cards).<sup>1170</sup>
935. Finally, the Authority has shown in Section 9.2.1.3.3 above that, even on the merchant market (i.e. excluding self-supply) for wholesale mobile access and origination services sold to third parties, Telenor's market share was rather stable at 50% or more during the Period under Consideration, with the only exception being in 2008. As shown in Section 9.2.2.3 above, the limited instances of switching that took place in 2007/early2008 (with Tele2 switching from Telenor to Telia and NwN from Telia to Telenor) do not represent evidence of effective competition on the relevant wholesale market during the Period under Consideration.

#### 10.5.2.5.1.2 The appropriate level of aggregation

936. Second, Telenor reiterates its claim that the Authority assesses margins at an incorrect aggregation level and that the arena of competition over which important entry and exit decisions were made was broader than residential stand-alone MBB. According to Telenor, negative margins on residential stand-alone MBB are not therefore capable of producing anti-competitive effects.<sup>1171</sup>
937. Telenor refers to comments made by its competitors and observes that, with the exception of small SPs (e.g. Lycamobile) and ICE (which only supplied MBB), all mobile communications providers supplied both ordinary mobile communications services and

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2012 onwards; see footnote 1158 above). In any event, Telenor notes that all customers, even if bound by an exclusivity clause, could have had a parallel wholesale agreement with ICE for wholesale data.

<sup>1168</sup> For example, Telenor notes that its merchant market share fell from 82% in the first half of 2007 to 34% in the first half of 2008 (when Tele2 switched to Telia in 2007) and then increased to around 58% in 2008 (when NwN in turn switched from Telia to Telenor); see Reply to the SO, Section 4.3.6.3.

<sup>1169</sup> See Section 10.5.1 above.

<sup>1170</sup> See paragraphs 530–539.

<sup>1171</sup> See Reply to the SO, Section 5.5.7.

stand-alone MBB. Telenor notes further that its revenues from stand-alone MBB represented no more than 5% of its total mobile revenues during the Period under Consideration. In Telenor's view, this is representative of the proportion that stand-alone MBB would have represented out of all mobile revenues across all operators.<sup>1172</sup> A price squeeze relating to residential stand-alone MBB would not therefore have affected the entry or exit decisions of competitors.

938. As shown in Section 10.3.5 above, the Authority considers that, in this case, the correct level of aggregation at which to carry out the margin squeeze assessment is the relevant retail market. The Authority considers that it is therefore correct to assess the existence of anti-competitive effects at the level of the relevant retail market during the Period under Consideration, and rejects Telenor's argument that the assessment should be made over a broader portfolio of services. As the Commission found in *Deutsche Telekom*, it cannot be assumed that all competitors have the same revenue structure as the established operator and thus the same scope for offsetting one source of revenue against another.<sup>1173</sup>

#### 10.5.2.5.1.3 Conclusion

939. For the reasons summarised in paragraphs 933–935 and 938 above, the Authority rejects Telenor's claims that its conduct was unlikely to exclude competitors due to an existence of alternative sources of supply, or as a result of the arena of competition being wider than stand-alone MBB services provided to residential customers.

#### 10.5.2.5.2 *Telenor's claim that there were effective constraints on residential stand-alone MBB services regardless of exclusion*

940. Independently of the above arguments, Telenor considers that, even if the exclusion of particular wholesale customers were likely, there were effective constraints on residential stand-alone MBB services at the downstream level.<sup>1174</sup> Telenor argues that, even if certain wholesale customers might have been excluded from the residential stand-alone MBB market,<sup>1175</sup> there was, in any event, no prospect that prices for stand-alone MBB services provided to residential customers could have been above competitive levels

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<sup>1172</sup> See Reply to the SO, paragraphs 488–489 and Annex 14 of the Reply to the SO, paragraph 123.

<sup>1173</sup> *Deutsche Telekom* Decision, paragraphs 126–128.

<sup>1174</sup> See, in particular, Reply to the SO, Section 5.5.9 and Annex 14 of the Reply to the SO, Section 6.

<sup>1175</sup> Telenor argues that the primary purpose of Article 54 EEA is to protect an effective competitive process and, in particular, to safeguard the interests of consumers (rather than to protect the position of particular competitors) and that “*not every exclusionary effect is necessarily detrimental to competition*”. See Annex 14 of the Reply to the SO, paragraph 34 *et seq.*

during the Period under Consideration.<sup>1176</sup> Telenor claims that there was no likelihood of consumer harm, because:

- (a) Telenor was effectively constrained by independent rivals unaffected by the alleged margin squeeze (e.g. by MNOs, such as Telia and ICE; and by Tele2, which relied on Telia's network during the Period under Consideration),<sup>1177</sup> and
- (b) There was effective competition between stand-alone MBB services provided to residential customers and other demand-side alternatives, namely: MTDS, FBB (including Wi-Fi) and bundles of telephony SIMs and MBB SIMs.<sup>1178</sup>

941. The Authority disagrees with Telenor's claim that it was effectively constrained by independent rivals unaffected by the alleged margin squeeze practices. The Authority refers to Section 9.3 above, where it is shown that Telenor had a high degree of market power in the relevant retail market during the Period under Consideration.
942. The Authority also recalls that the wholesale customers of Telia, such as Tele2, could not be expected to compete vigorously on the relevant downstream market, given the unfavourable terms provided by Telia.<sup>1179</sup> It is therefore unlikely that Telia's wholesale customers constrained Telenor in any meaningful way on the relevant retail market. For example, it has been shown above (see paragraph 373 and Annex 2 to this Decision) that Tele2 earned negative margins when providing MBB to residential customers using wholesale access purchased from Telia.<sup>1180</sup> Telenor's economic advisor stated that the role of Tele2 in terms of competition to supply stand-alone MBB "seems to have been limited".<sup>1181</sup> This is confirmed by Tele2's low market share on the relevant retail market (see paragraph 645 above<sup>1182</sup>).<sup>1183</sup>
943. In relation to the alleged competitive constraint exerted by demand-side alternatives for residential stand-alone MBB services, the Authority refers to Sections 8.4.3.2, 8.4.4.2

<sup>1176</sup> See, in particular, Annex 14 of the Reply to the SO, Section 6.3.

<sup>1177</sup> See, in particular, Reply to the SO, Section 5.5.9 and Annex 14 of the Reply to the SO, Section 6.1.

<sup>1178</sup> See, in particular, Reply to the SO, Section 5.5.9 and Annex 14 of the Reply to the SO, Section 6.2.

<sup>1179</sup> See paragraph 373 above.

<sup>1180</sup> Tele2 pointed at the inherent risk of a price squeeze in its reply of 9 May 2014 to the Authority's request for information dated 28 March 2014 (see Document No 788751 for the non-confidential version), pages 7–9: "Tele2 decided to offer MBB in May 2008. Prior to the launch, Tele2 considered the price plans and strategic value of the MBB offering carefully, due to the inherent risk of a margins squeeze since Tele2 was an MVNO, relying on paying for all traffic in NetCom's [i.e. Telia's] network."

<sup>1181</sup> See Annex 14 to the Reply to the SO, paragraph 134: "Tele2 launched its stand-alone MBB offerings in May 2008, including a plan that, according to Tele2, offered unlimited traffic at a competitive price and with a subsidised device. However, after growing from 0% at that time to 2.5% in 2010, its share of stand-alone MBB subsequently declined to 1.3% by 2012. Although Tele2 may have played some role in terms of competition to supply stand-alone MBB in particular in 2008 and 2009, that role seems to have been limited."

<sup>1182</sup> Tele2 is included in the category "Other" in Table 10 above, which never reached a market share of more than 5.5% on the relevant retail market during the Period under Consideration.

<sup>1183</sup> See also the figures set out at paragraph 134 of Annex 14 to the Reply to the SO.

and 8.4.5 above, where it concluded that such constraints were very limited during the Period under Consideration.

944. More generally, even if certain competitive constraints remained, the exclusion or hindering of such as-efficient actual or potential competitors must be considered as detrimental to the structure of competition on the market. In mobile communications markets, the purpose of wholesale access at SP, MVNO and NRO levels is to facilitate entry and expansion by mobile communications providers of differing size and infrastructure profiles.<sup>1184</sup> In making use of such wholesale access, SPs, MVNOs and NROs can deliver mobile communications services and thus have the opportunity to grow a critical customer base. This may facilitate greater competitive pressure on both pricing and non-price service features, as well as potentially supporting further investments and the development of progressively stronger competitors over time.<sup>1185</sup> Telenor's conduct was, however, likely to hinder, or was at least capable of hindering these operators from expanding in an evolving and fast-growing market. Therefore, its conduct had in any event a potential anti-competitive effect on competition within the meaning of the case law, and the above arguments must also for this reason be rejected.<sup>1186</sup>

#### 10.5.2.5.3 *Alleged absence of actual impact on competition*

##### 10.5.2.5.3.1 Telenor's argument in general

945. Telenor argues that its conduct did not have any *actual* exclusionary effect in relation to residential stand-alone MBB services.<sup>1187</sup> While it acknowledges that the Authority is not obliged to demonstrate actual negative effects,<sup>1188</sup> Telenor claims that "*the absence of any concrete actual effects is indicative of the practices not being capable of producing negative effects, in particular in a case like this where the Authority holds that the infringement started in 2008 and ended in 2012*".<sup>1189</sup>
946. Telenor therefore considers that "[i]t is clearly legally relevant to check the market behaviour and market developments before and after the abuse period in order to check the validity of a theory of harm related to the behaviour under consideration".<sup>1190</sup> According to Telenor, the Authority should "*in the very least*", by way of factual context for an analysis of potential effects, have described the development of residential stand-alone MBB services and MTDS from 2008 to 2012, including all operators and all offers.

<sup>1184</sup> See paragraph 890 and footnote 1119 above.

<sup>1185</sup> See paragraphs 890–893 above.

<sup>1186</sup> Judgment of 21 February 1973, *Europemballage Corporation and Continental Can Company*, 6/72, EU:C:1973:22, paragraph 26; judgment of 13 February 1979, *Hoffmann-La Roche*, 85/76, EU:C:1979:36, paragraph 125; and judgment of 15 March 2007, *British Airways*, C-95/04 P, EU:C:2007:166, paragraph 106.

<sup>1187</sup> See, in particular, Reply to the SO, Section 5.5 and Annex 14 of the Reply to the SO, Section 7. See also Reply to the SSO, Section 6.3.2.

<sup>1188</sup> See Reply to the SO, paragraph 452, and Annex 14 of the Reply to the SO, paragraph 153.

<sup>1189</sup> See Reply to the SO, paragraph 452.

<sup>1190</sup> See Reply to the SSO, Section 6.3.2.1 and Reply to the SO, paragraphs 452–455.

947. First, the Authority recalls, as set out in Section 10.5.1 above, and as acknowledged by Telenor,<sup>1191</sup> that it is settled case law that: “for the purposes of establishing an infringement of Article 54 EEA, it is not necessary to show that the abuse under consideration had an actual impact on the relevant markets. It is sufficient in that respect to show that the abusive conduct of the undertaking in a dominant position tends to restrict competition or, in other words, that the conduct is capable of having that effect.”<sup>1192</sup>
948. As held by the GCEU in *Telefónica*, this applies even if a significant amount of time has elapsed between the beginning of the conduct under investigation and the adoption of the competition authority’s decision: “the Court rejects the applicants’ argument that, in view of the time that elapsed between the beginning of the impugned conduct and the adoption of the contested decision, it was not appropriate to carry out a test of probable effects, as the Commission had the time necessary to show that the alleged anti-competitive effects linked with the conduct in question did in fact materialise. Nor does such an argument have any basis in the case-law.”<sup>1193</sup>
949. Telenor’s argument above primarily amounts to the claim that the Authority should assess actual effects on the market in order to determine whether it has correctly concluded that at least potential effects were probable. On the basis of the above case law, this claim (and the related claims, below in Section 10.5.2.5.3.2), must be rejected.
950. Second, while Telenor refers to a number of sources in support of its claim that the absence of actual effects should be taken into consideration, these sources are in any event irrelevant or of limited relevance.
951. In particular, Telenor refers to paragraph 20 of the Commission’s Article 102 Guidance Paper.<sup>1194</sup> However, as clearly stated in paragraph 2 of that Guidance Paper, its purpose is to set out *enforcement priorities* that will guide the Commission’s actions in applying Article 102 TFEU to exclusionary conduct by dominant undertakings.<sup>1195</sup> While evidence of actual effects *may*<sup>1196</sup> be a relevant factor when a competition authority decides

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<sup>1191</sup> See Reply to the SO, paragraph 452, and Annex 14 of the Reply to the SO, paragraph 153.

<sup>1192</sup> See paragraph 877 above.

<sup>1193</sup> See judgment of 29 March 2012, *Telefónica*, T-336/07, EU:T:2012:172, paragraph 272.

<sup>1194</sup> See Reply to the SO, paragraph 452, and Annex 14 to the Reply to the SO, paragraph 154.

<sup>1195</sup> See judgment of 6 October 2015, *Post Danmark*, C-23/14, EU:C:2015:651, paragraph 52, where the Court stated that “it must be observed, as a preliminary point, that that document [the Guidance Paper] merely sets out the Commission’s approach as to the choice of cases that it intends to pursue as a matter of priority”.

<sup>1196</sup> The Authority notes the term “may” in paragraph 20 of the Commission’s Article 102 Guidance Paper (emphasis added by the Authority): “The Commission will normally intervene under Article [102 TFEU] where, on the basis of cogent and convincing evidence, the allegedly abusive conduct is likely to lead to anti-competitive foreclosure. The Commission considers the following factors to be generally relevant to such an assessment: (...) - possible evidence of actual foreclosure: if the conduct has been in place for a sufficient period of time, the market performance of the dominant undertaking and its competitors may provide direct evidence of anti-competitive foreclosure. For reasons attributable to the allegedly abusive conduct, the market share of the dominant undertaking may have risen or a decline in market share may have been slowed. For similar reasons, actual competitors may have been marginalised or may have exited, or potential competitors may have tried to enter and

whether to prioritise a case, this is a fundamentally different question from whether the absence of actual effects must be taken into account in the assessment of an abusive practice.

952. Telenor also refers to a decision of the UK NRA Ofcom in the *Wholesale Calls* case. In its statement of objections in that case, Ofcom had considered that certain anti-competitive effects might result from British Telecom's margin squeeze conduct. Having reviewed further evidence, Ofcom concluded in its decision that it was no longer satisfied that the potential anti-competitive effects which it had identified in its statement of objections were present. It therefore found that there were no grounds for action.<sup>1197</sup> The Authority observes that, in reaching its view, Ofcom correctly confirmed, based on settled case law of the European Courts, that it was only required to demonstrate potential anti-competitive effects.<sup>1198</sup> While Ofcom did take into account evidence of market developments during and after the margin squeeze in reaching its decision, this is not presented as a legal requirement, and Ofcom makes clear that the failure of the potential anti-competitive effects to materialise was related to the specific circumstances of the case.<sup>1199</sup>
953. Third, Telenor is wrong in claiming that the Authority has not provided a factual context for the analysis of potential effects. In Sections 8.4.3.2, 8.4.4.2 and 8.4.5, the Authority has shown that stand-alone MBB sold to residential customers did not face material constraints from other products such as FBB or MTDS. In this context, the Authority has, *inter alia*, assessed product characteristics, prices and intended usage.<sup>1200</sup>
954. Moreover, in Section 8.4.2 the Authority has described the evolution of MBB services in Norway from their launch in 2005 until 2014, including the evolution of the number of subscribers, revenues and market shares. In addition, the Authority has described the evolution of MBB services compared to MTDS. The description in Section 8.4.2 includes a comparison of the evolution of stand-alone MBB subscriptions between Norway and neighbouring countries. It also includes an internal memorandum of October 2010<sup>1201</sup> setting out Telenor's own description of the MBB market in 2010. The memorandum describes that market as a duopoly between Telenor and Telia and as displaying "significant growth".<sup>1202</sup> This internal memorandum further considered potential entry from a newcomer (Hi3G) targeting this (at the time) underdeveloped MBB market as

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*failed.*" Thus, "possible evidence of actual foreclosure" is one of the factors that *may* be taken into account when deciding which cases to prioritise.

<sup>1197</sup> See Reply to the SO, paragraph 453–455 (reference to Ofcom Wholesale Calls Case, CW/988/06/08, Final Decision, 20 June 2013 "the Ofcom Decision"), and Annex 14 to the Reply to the SO, paragraphs 156–159; see also the Reply to the SSO, paragraph 211.

<sup>1198</sup> See the Ofcom Decision, paragraphs 7.18–7.33 and 7.30 in particular.

<sup>1199</sup> See the Ofcom Decision, paragraphs 1.33, 7.12 and 7.14.

<sup>1200</sup> See Sections 8.4.3.2.1, 8.4.3.2.2, 8.4.4.2.1 and 8.4.4.2.2 above.

<sup>1201</sup> See footnote 237 above.

<sup>1202</sup> See footnote 241 and paragraph 646 (including footnote 874) above. The Authority further recalls that in an internal presentation of 8 April 2008 (See Document No 1097593, page 2), Telenor described MBB as one of the "*Must Win Battles for Telenor in 2008*" (see paragraph 179 above).

“the main area for new establishment” in Norway.<sup>1203</sup> From this, it can be seen that the finding of potential anti-competitive effects is not inconsistent with the broader factual background at the time.

#### 10.5.2.5.3.2 Telenor’s specific arguments regarding the alleged absence of actual effects

##### *Introduction*

955. In support of its claim that any margin squeeze did not have any actual effects, Telenor also presents data concerning: market shares of wholesale customers during and after the Period under Consideration; prices and volumes of MBB subscriptions; churn rates; investment in network quality; and the overall performance of the sector for consumers.<sup>1204</sup>
956. As the Authority has shown in Section 10.5.1 above, the jurisprudence of the European Courts does not require the Authority to prove actual anti-competitive effects on the relevant market during the Period under Consideration, nor is it necessary for the Authority to prove direct consumer harm, for example, in terms of higher prices or poorer quality of the services. In any event, Telenor’s analyses of the data suffer from several flaws and weaknesses, as shown below.

##### *Evolution of the wholesale customers’ market shares*

957. Telenor argues that wholesale customers (i.e. operators other than Telenor, Telia and ICE) increased their combined market share of MBB revenues from 0% to 9.7% over the period from 2008 to 2012, notwithstanding the alleged margin squeeze and “*rapidly falling retail prices*”.<sup>1205</sup> According to Telenor, this shows that wholesale customers were not prevented from entering and competing successfully in the supply of stand-alone MBB products and that retail customers could (and did) buy stand-alone MBB products

<sup>1203</sup> See footnote 237 above. In Section 5.2.2 of its Reply to the LoF, Telenor acknowledges that this document discusses the likelihood of Hi3G entering the Norwegian market and that this entry would likely be in the MBB market. It adds that “*the fact that someone in Telenor in late 2010 believed that the potential for a new MNO with focus on mobile data was greater in the MBB segment than in the mobile telephony segment, is no evidence that negative margins for Telenor wholesale customers in 2008-2010 was likely to have any negative effects on competition*”. Telenor again claims in this respect that the arena of competition was broader than residential stand-alone MBB. This claim has been discussed and rejected in Section 10.3.5 above. In the Authority’s view, this internal memorandum shows that within Telenor, the opinion was expressed that the MBB segment was more likely to attract new entrants than the mobile telephony segment. This shows that the MBB market had more potential than the mobile telephony market. In addition, Telenor acknowledges that MBB was perceived as “an important growth-product in 2008” (see Section 5.2.2 of its Reply to the LoF). This shows that MBB was an important growth product during the Period under Consideration and that the negative gross margins for Telenor’s wholesale customers were therefore capable of having an anti-competitive effect, given the growth potential of that market.

<sup>1204</sup> See Reply to the SO, paragraph 525; Annex 14 to the Reply to the SO, Section 7.2; and Reply to the SSO, Section 6.3.2.

<sup>1205</sup> Section 7.2.4 of Annex 14 to the Reply to the SO, where reference is also made to Figures 4 and 5 in Section 6.1 of Annex 14 of the Reply to the SO.

from non-MNOs (in addition to having other alternatives available, such as MTDS and FBB and Wi-Fi).

958. Moreover, Telenor notes that wholesale customers increased their market share in the supply of stand-alone MBB products between 2008 and 2010, even though gross margins were negative during 2008 and 2009 (i.e. even according to Telenor's calculations). Conversely, their share did not increase significantly in 2011 and 2012, when margins in stand-alone MBB "were healthy" (according to Telenor's calculations).<sup>1206</sup> According to Telenor, this confirms that wholesale customers were able to compete in the supply of stand-alone MBB products in all years, despite margins being negative in some years.
959. The Authority finds that Telenor's statement in relation to the growth to 9.7% is not relevant, as this figure seems to combine residential and business MBB market shares, and is therefore not informative about the relevant retail market in this case. As illustrated in Section 9.3 above, during the Period under Consideration, Telenor's wholesale customers that were subject to the margin squeeze practices had insignificant market shares in the relevant downstream market (i.e. the supply of stand-alone MBB to residential customers). For example, neither Ventelo nor NwN achieved a market share (based on revenues) above 1%. As also illustrated in the Table 10 in paragraph 645 above, the aggregated market share of "Other" customers was never above 5.5%. This latter percentage even includes Telia's wholesale customers.<sup>1207</sup>
960. Besides, contrary to Telenor's assertions, even if the non-MNOs' market shares had increased, which the Authority does not accept to have been the case to any material extent, this still does not mean that the pricing practices had no effect. If the practices had not been implemented (i.e. absent the negative gross margins), their market shares might have increased more significantly.<sup>1208</sup>
961. As regards Telenor's claim that margins turned "healthy" in 2011 and 2012, the Authority notes that Ventelo's gross margins were also negative in a number of months after November 2010.<sup>1209</sup> In addition, it should be recalled that the Authority has employed a conservative approach by not taking into account product-specific retail costs. Moreover, the SPs' gross margins remained negative during the entire Period under Consideration. It is therefore incorrect to claim that the margins turned "healthy" in 2011 and 2012.

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<sup>1206</sup> See Annex 14 to the Reply to the SO, paragraph 180.

<sup>1207</sup> The Authority's calculations (see Document No 1076159) are based on the disaggregated figures from Nkom for its 2014 e-com report (see Document No 781987).

<sup>1208</sup> Judgment of 8 October 1996, *Compagnie Maritime Belge*, T-24/93, T-25/93 and T-28/93, EU:T:1996:139, paragraph 149; see also judgment of 30 September 2003, *Michelin II*, T-203/01, EU:T:2003:250, paragraph 245: "The applicant cannot base an argument on the fact that its market shares and prices fell during the period in question. When an undertaking actually implements practices with the aim of restricting competition, the fact that the result sought is not achieved is not enough to avoid the application of Article [102 TFEU] (*Joined Cases T-24/93 to T-26/93 and T-28/93 Compagnie maritime belge transports and Others v Commission, cited at paragraph 35 above, paragraph 149*). In any event, it is very probable that the fall in the applicant's market shares [...] and in its sales prices [...] would have been greater if the practices criticised in the contested decision had not been applied."

<sup>1209</sup> See footnote 1117 above.

962. Telenor claims further that the fact that neither NwN nor Ventelo achieved a market share higher than 1% also in the period following the Period under Consideration weakens the ability of the development during the Period under Consideration to serve as any kind of informative “indication”.<sup>1210</sup> In addition, Telenor claims that statements made in a presentation in connection with a board meeting in NwN in August 2010<sup>1211</sup> indicate that stand-alone MBB was not a product of interest for NwN.
963. Telenor’s arguments on the development of market shares during and after the Period under Consideration are not convincing.
964. The market shares during and after the Period under Consideration may well have been affected by a number of factors and the presence of a margin squeeze is only one of them. Telenor does not take into account other factors when assessing the development.
965. For example, as observed by the Authority in Section 8.4.4.2, the competitive pressure from MTDS may have become stronger after 2012. As a consequence, the economic incentives to enter and/or to grow in the residential stand-alone MBB market may have been lower after 2012.<sup>1212</sup>
966. Regarding Telenor’s specific observation that a presentation prepared for a board meeting in NwN indicates that MBB was not a product of interest (see paragraph 962 above), the Authority notes that the very same document indicates that NwN did foresee an increase in the number of MBB subscriptions from 6 000 in 2010 to 140 000 in 2014. The Authority therefore considers that the inference that MBB was not a product of interest for NwN cannot be conclusively drawn from this document.<sup>1213</sup>

*Development of stand-alone MBB prices and usage*

967. Telenor argues that its own prices for stand-alone MBB – expressed in terms of ARPU and average revenue per MB (“ARPMB”) – fell significantly over the Period under Consideration.<sup>1214</sup> According to Telenor, this reduction in prices would not be consistent with a lack of direct competition for the provision of stand-alone MBB services or a lack of constraints from alternative products.
968. Telenor argues further that there was an increase in stand-alone MBB usage by its customers (both in absolute terms and in terms of average MB per user – “AMBPU”)

<sup>1210</sup> See Reply to SSO, Section 6.3.2 and in particular paragraph 210.

<sup>1211</sup> See paragraphs 222 and 223 of the Reply to the SSO and Annex 4 to the Reply to SSO.

<sup>1212</sup> The Authority notes in this respect that according to Telenor (see paragraph 170 of Annex 14 to the Reply to the SO), the stagnation of growth and the decline in the number of stand-alone MBB subscriptions observed in 2012 and 2013 is consistent with substitution to demand-side alternatives to stand-alone MBB products. However, as demonstrated in 8.4.3.2, 8.4.4.2 and 8.4.5 above, the Authority does not consider that this was the case during the Period under Consideration.

<sup>1213</sup> See further paragraph 901, where NwN has explained that the spread between the wholesale tariff and retail revenues resulted in it employing a passive commercial strategy in relation to MBB services, which therefore resulted in a very low market share.

<sup>1214</sup> Section 7.2.1 of Annex 14 to the Reply to the SO and in particular Figure 6.

during the Period under Consideration.<sup>1215</sup> According to Telenor, this increase in volume of data consumed – and the increase in the number of stand-alone MBB subscriptions across operators during the period<sup>1216</sup> – is consistent with effective competition between operators and does not indicate harm to consumers.<sup>1217</sup>

969. The Authority disagrees with Telenor's interpretation of the data relating to prices and volumes for stand-alone MBB subscriptions during the Period under Consideration.
970. First of all, falling prices and increasing volumes do not necessarily indicate strong competition, as these could be affected by a number of other factors. For example, the novelty of MBB services and consumers' increased interest in data-based applications could be one explanation for the increasing data volumes, especially at the time that MBB services were first introduced. As to prices, the Authority recalls that, in the case of Telenor's retail prices, their level – when compared to the wholesale prices it charged to its wholesale customers – resulted in negative gross margins and thus margin squeezes in this case, as described in Section 10.4 above.<sup>1218</sup> Therefore, the fact that Telenor's prices were reduced might not be evidence of competition in this case, but rather evidence to the contrary. Further and alternatively, the Authority observes that the fact that prices decreased and volumes increased during the Period under Consideration does not mean that Telenor's conduct was without any effect, given that, if the margin squeeze practices had not been implemented, the prices may have decreased and the volumes may have increased more significantly.<sup>1219</sup>
971. Second, as discussed in Section 9.3 above, Telenor had a high degree of market power in the relevant downstream market during the Period under Consideration, which indicates that competition was limited. It described the market as a duopoly between itself and Telia.<sup>1220</sup> Moreover, neither the wholesale customers of Telenor nor those of Telia could have been expected to compete vigorously on the downstream market, given the unfavourable terms provided by the two established MNOs.<sup>1221</sup> This was reflected in the low market shares of these wholesale customers during the Period under Consideration (see paragraphs 645 and 959 above).

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<sup>1215</sup> See Figure 7 of Annex 14 of the Reply to the SO.

<sup>1216</sup> See Figure 8 of Annex 14 of the Reply to the SO.

<sup>1217</sup> According to Telenor (see paragraph 170 of Annex 14 to the Reply to the SO), the stagnation of growth and the decline in the number of stand-alone MBB subscriptions observed in 2012 and 2013 is consistent with substitution to demand-side alternatives for stand-alone MBB products.

<sup>1218</sup> Incidentally, the Authority notes that a substantial reduction in Telenor's prices (expressed in terms of ARPU or ARPMB) only took place immediately prior to 2008; after that, Telenor's prices fell to a much lesser extent or remained broadly constant. See, again, Figure 6 in Annex 14 of the Reply to the SO.

<sup>1219</sup> See footnote 1208 above.

<sup>1220</sup> See Document No 656746 – JN1 31, internal memorandum to Telenor's management of October 2010, page 4/8).

<sup>1221</sup> See Section 10.4 and paragraph 373 above.

*Churn rates*

972. Telenor presents churn rates for its own residential stand-alone MBB plans and residential mobile telephony plans.<sup>1222</sup> Telenor notes that the churn rate for stand-alone MBB was higher than for mobile telephony throughout the Period under Consideration and argues that this was likely due, in large part, to “outside” churn (i.e. customers ceasing to buy MBB altogether), rather than to “within-product” churn (i.e. customers switching to MBB products of Telenor’s competitors). Moreover, Telenor argues that MBB churn rates of 25% to 40% (and even higher towards the end of 2012) are consistent with the proposition that MBB was subject to effective constraints from both competitors “within” the product and alternative “outside” products.
973. The Authority disagrees with Telenor’s conclusion. The Authority observes that churn rates may provide limited information on the overall degree of competition in the market as such, being better suited for measuring closeness of competition between specific firms operating in the same market (as typically employed in telecommunications markets<sup>1223</sup>).
974. Against this general consideration, the Authority takes the view that even churn rates of 25% to 40% for MBB during the Period under Consideration, viewed in isolation, may not indicate that the relevant market at the downstream level in this case was competitive. On the contrary, this evidence should be seen against the fact that, in the relevant retail market, Telenor consistently maintained a market share of close to or above 50% during that period<sup>1224</sup> and was found by the Authority to hold a high degree of market power.<sup>1225</sup> In addition, a comparison with churn rates for ordinary mobile communications services may not be particularly illustrative given the differences in the services involved (and different timelines for the introduction of those services compared to stand-alone MBB), which may well imply differing consumption patterns. Further, the Norwegian NCA found Telenor to have a dominant position in the retail market for mobile communications from 2010 to 2014.<sup>1226</sup> Therefore, the fact that the churn rates in that market were lower than in the residential stand-alone MBB market does not necessarily mean that there was effective competition in the latter market.

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<sup>1222</sup> Section 7.2.2 of Annex 14 of the Reply to the SO and Figure 9 therein. When Telenor refers to “mobile telephony” plans, this corresponds to what the Authority defined as “ordinary mobile communications services”.

<sup>1223</sup> See Guidelines on the assessment of horizontal mergers under the Council Regulation on the control of concentrations between undertakings (OJ C 31, 5.2.2004, p. 5), paragraph 29; see also Commission Decision of 12 December 2012 in Case M.6497 – *Hutchison 3G Austria/Orange Austria*, paragraph 176; *Telefónica Deutschland/E-Plus* Decision, paragraphs 273 and following; Commission Decision of 1 September 2016 in Case M.7758 – *Hutchison 3G Italy/Wind/JV*, paragraph 785; Commission Decision of 11 May 2016 in Case M.7612 – *Hutchison 3G UK/Telefónica UK*, paragraph 443; and Commission Decision of 28 May 2014 in Case M.6992 – *Hutchison 3G UK/Telefónica Ireland*, paragraphs 308–309.

<sup>1224</sup> See paragraph 645 above.

<sup>1225</sup> Section 9.3 above.

<sup>1226</sup> Norwegian NCA’s Decision V2018-20, Section 10.3.7. Confirmed on appeal by the Norwegian Competition Tribunal, see Norwegian Competition Tribunal’s Decision V03/2019, paragraph 172.

975. Finally, as explained in paragraphs 242 and 335, the fact that many customers left the market cannot be interpreted as a valid indicator of a substantial competitive constraint from other products.

*Investments in network quality*

976. Telenor argues further that, during the Period under Consideration, Telenor, Telia and ICE all made substantial investments in new technology to improve the coverage and speed of their networks.<sup>1227</sup> At the same time, NwN and Tele2 were jointly rolling out a fourth network (through their joint venture Mobile Norway). According to Telenor, the amount that Telenor invested in its network, in response to the increase in demand for mobile data over the period and the need to remain competitive with Telia and ICE, shows the extent of competition that the company faced during that period. In Telenor's view, a firm that was not subject to competitive pressures on the retail market and thus enjoyed market power would not have strong incentives to improve its network to the same extent.
977. First, the Authority observes that Telenor's statements in relation to investments made are highly general in nature. Telenor simply asserts that the investments at network level were driven by competition on the retail market. No evidence is provided of this.
978. Second, the Authority disagrees with Telenor's characterisation of its own investments in network quality, as well as of those made by its competitors. It should be recalled that mobile communications services, including mobile data services, require a high degree of innovation and investments in mobile networks to simply keep pace with technological developments.<sup>1228</sup> These investments were also required due to the increasing demand for mobile data. Further, as explained in Section 9.2.2.2 above, the Authority recalls that ICE, NwN and Tele2 (individually or through their joint venture Mobile Norway) were all unable to exert a significant competitive constraint on Telenor on the relevant wholesale market, despite the network investments realised. In addition, as shown in paragraph 503 above, during the Period under Consideration, due to the limited coverage of the Mobile Norway network, both NwN and Tele2 were still heavily dependent on the wholesale inputs provided by Telenor and Telia respectively. This limited their ability to compete on the relevant retail market. Moreover, as explained in paragraph 522 above, although investing in its mobile network, Telia had limited incentives to compete with Telenor in the wholesale market. Lastly, as shown in Section 9.3 above, the Authority recalls that Telenor had a high degree of market power in the relevant downstream market during the Period under Consideration, despite the alleged significant investments in network quality by its competitors. As a result, the Authority rejects Telenor's claim that its investments in network quality show that it was subject to competitive pressure and that they constitute evidence of a lack of market power at retail level.

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<sup>1227</sup> Annex 14 of the Reply to the SO, Section 7.2.3.

<sup>1228</sup> For example, the overall share of investments by mobile operators as a percentage of overall mobile market revenues in the EU was approximately 11% in both 2007 and 2008 respectively. See the European Commission's 15<sup>th</sup> Progress Report on the Single European Electronic Communications Market, Staff Working Document Part 2, Section 1.1, Table 1 and Table 2; available at: <https://ec.europa.eu/digital-single-market/en/news/progress-report-single-european-electronic-communications-market-2009-15th-report-sec2010630>, accessed June 2020.

*Alleged competition in the overall supply of mobile communications services*

979. Telenor argues that, more generally, the “mobile sector” in Norway performed well for consumers during the Period under Consideration.<sup>1229</sup> Specifically, Telenor notes that the retail prices of mobile telephony services decreased significantly during the Period under Consideration and in the following years, while the number of mobile telephony subscriptions and the volume of mobile data traffic increased during the same timeframe. Moreover, according to Telenor, the prevailing switching (churn) rates – with 10% to 12% of Telenor’s customers switching to competitors in a year and up to 20% of overall consumers reportedly changing mobile communications providers in the same period – are consistent with consumers having options and with a lack of significant barriers to switching during the Period under Consideration.<sup>1230</sup>
980. Telenor also argues that, throughout the Period under Consideration, consumers had access to innovative products (such as bundles of mobile telephony SIMs and MBB SIMs in 2010 and all-in bundles of voice, SMS and data in 2013) and that the mobile sector in Norway was characterised by rapid technological development and significant investments by MNOs, as well as by MVNOs.<sup>1231</sup> Telenor considers that many players, including MVNOs and SPs with commercial agreements with Telenor, Telia and ICE, as well as with each other, were active in supplying mobile telephony services.<sup>1232</sup> According to Telenor, this evidence is not reconcilable with a finding by the Authority of anti-competitive exclusionary behaviour in this case.
981. The Authority disagrees with the conclusion which Telenor seeks to draw from the stated performance of the mobile communications sector in general.
982. First, even assuming it were true that the mobile communications sector worked well in general, it is not relevant, as it does not provide any useful information as to the performance of the relevant downstream market in this case, i.e. residential stand-alone MBB services.
983. Second, as shown in Section 9.3 above, Telenor had a high degree of market power in the relevant downstream market, on which it held consistently high market shares during the entire Period under Consideration. This contrasts with the negligible market shares that its wholesale customers – which the Authority has shown were margin squeezed – managed to obtain in the same period.
984. Third, the Norwegian NCA concluded that Telenor also had a dominant position in a broader retail market for mobile communications services from August 2010 to June

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<sup>1229</sup> Annex 14 to the Reply to the SO, Section 7.3.

<sup>1230</sup> Annex 14 to the Reply to the SO, paragraph 185.

<sup>1231</sup> Annex 14 to the Reply to the SO, paragraphs 186–187.

<sup>1232</sup> Annex 14 to the Reply to the SO, paragraph 188.

2014, which partly overlaps with the Period under Consideration.<sup>1233</sup> Therefore, the degree of competition was also found to be limited in that broader market.

#### 10.5.2.5.4 Telenor's claim that Ventelo and the SPs were not actual or potential competitors

985. Telenor argues that the wholesale customers subject to the alleged margin squeeze had to a large extent during the whole or part of the Period under Consideration been focusing on the business segment.<sup>1234</sup> According to Telenor, it is therefore unlikely that its conduct was liable to have any impact on competition for the provision of MBB services to residential customers.
986. In this context, Telenor claims that Ventelo and the SPs were not actual or potential competitors in the relevant market during the Period under Consideration.<sup>1235</sup> Telenor claims that they should be dismissed as potential competitors, like TDC.<sup>1236</sup>
987. The Authority first recalls that a firm will be considered a potential competitor, provided there is a real possibility that it could enter the relevant market with sufficient immediacy to form a constraint on market participants.<sup>1237</sup> When making this assessment, a number of factors are relevant, including the structure of the relevant market<sup>1238</sup> and barriers to entry, and the extent to which there is already entry in neighbouring market segments.<sup>1239</sup>
988. Against this background, the Authority rejects Telenor's claim that Ventelo and the SPs were not actual or potential competitors.
989. Ventelo and the SPs were either active in the relevant retail market during the Period under Consideration,<sup>1240</sup> entered the relevant market after the Period under

<sup>1233</sup> Norwegian NCA's Decision V2018-20, Section 10.3.7.

<sup>1234</sup> See Reply to the SO, paragraph 506.

<sup>1235</sup> See Reply to the SSO, Section 6.3.2.4 and Section 7.

<sup>1236</sup> See Reply to the SSO, paragraphs 228 and 230 and Section 7.3.

<sup>1237</sup> See judgment 30 January 2020, *Generics (UK)*, C-307/18, EU:C:2020:52, paragraphs 35-39; judgment of 8 September 2016, *Lundbeck*, T-472/13, EU:T:2016:449, paragraph 203; judgment of 14 April 2011, *Visa*, T-461/07, EU:T:2011:181, paragraphs 68 and 188–189; and judgment of 15 September 1998, *European Night Services*, T-374/94, T-375/94, T-384/94 and T-388/94, EU:T:1998:198, paragraph 137.

<sup>1238</sup> See judgment of 12 December 2018, *Mylan*, T-682/14, EU:T:2018:907, paragraph 87; judgment of 15 September 1998, *European Night Services*, T-374/94, T-375/94, T-384/94 and T-388/94, EU:T:1998:198, paragraph 142; judgment of 29 June 2012, *E.ON Ruhrgas*, T-360/09, EU:T:2012:332, paragraphs 86 and 106; judgment of 8 September 2016, *Lundbeck*, T-472/13, EU:T:2016:449, paragraph 104; and judgment of 28 June 2016, *Telefónica*, T-216/13, EU:T:2016:369, paragraphs 207 and 213–215.

<sup>1239</sup> See for example judgment of 3 April 2003, *Babyliss*, T-114/02, EU:T:2003:100, paragraph 102.

<sup>1240</sup> The MVNO Ventelo did enter the residential stand-alone MBB market in February 2011 (see paragraph 993 below). The SPs Altibox, Ibidium and Ventelo/Ventelo Roaming also entered the market in 2011 (See Document No 781987). Hello had a very limited turnover in the MBB residential market in 2011 (see footnotes 1018 and 1019 above), and entered that market more fully in 2014, see: <<https://www.insidetelecom.no/artikler/hello-inn-i-privatmarkedet/165042>>, accessed June 2020. The Authority considers this strong evidence of the ability/potential of these SPs to enter the relevant retail market before those dates.

Consideration,<sup>1241</sup> and/or were active in a neighbouring market during the Period under Consideration, such as the MBB business market or the market for the supply of MTDS.<sup>1242</sup> Moreover, these operators would, if not already active in the residential stand-alone MBB market, have had the ability to enter this market absent Telenor's margin squeeze practices.<sup>1243</sup>

990. Regarding the ability to enter the market, the Authority notes that Telenor, in its Reply to the SSO, explains that SPs had lower costs, smaller organisations, online-based marketing, sales and support, etc., as their main competitive advantage.<sup>1244</sup> In the Authority's view, these characteristics clearly support the view that the SPs had the ability to enter a new retail market quite rapidly.
991. Further, the evidence presented below confirms that costs related to entering the relevant retail market during the Period under Consideration were in fact limited for the wholesale customers to which Telenor refers. The evidence shows that, absent the margin squeeze practices, entry into the residential stand-alone MBB market would have been an otherwise economically viable proposition for each category of wholesale customer, i.e. NROs, MVNOs and SPs. These wholesale customers should therefore be considered as at least potential competitors.<sup>1245</sup>
992. First, according to the NRO NwN, which was active in the relevant retail market (residential stand-alone MBB) during the Period under Consideration with its brands *One Call* and *My Call* (which both concerned the "Standard Residential Segment"), no specific incremental cost elements were identified when providing stand-alone MBB services in the residential market: "*No specific incremental cost elements identified and subsidies have not been used, but the equipment has been included in the price (at no extra cost)*".<sup>1246</sup> Telenor refers to and appears to accept this statement in its Reply to the SO, where it notes that "*Tele2 and Network Norway confirm that their consumer brands OneCall, My Call and Tele2 incurred no specific incremental costs relating to the provision of dedicated MBB services during the relevant period, beyond the costs of the 'equipment' (i.e., presumably the dongle)*".<sup>1247</sup>

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<sup>1241</sup> Telenor considers that Hello entered the residential stand-alone MBB market in 2014, rather than in 2011 (see footnote 1240 above, and the related footnote references therein). On any view, the Authority considers that such entry is evidence of the ability/potential of Hello to enter that market before that date.

<sup>1242</sup> The SPs Chilli, New Phone, Phonero and Bellit were active in one of these segments, see Document No 781987.

<sup>1243</sup> See paragraphs 366 and 431 above.

<sup>1244</sup> Reply to the SSO, Section 7.2.

<sup>1245</sup> However, as the relevant retail revenues were lower than the wholesale access costs for at least a significant part of the Period under Consideration, these wholesale customers faced an unprofitable business case for entering/expanding in the relevant retail market for the provision of stand-alone MBB to residential customers.

<sup>1246</sup> See Document No 788751 for the non-confidential version: reply of 9 May 2014 by Tele2 and Network Norway to the Authority's request for information of 28 March 2014, response to question 3.2.

<sup>1247</sup> See Reply to the SO, paragraph 168 and footnote 137, where reference is made to Document No 788751, i.e. Tele2 and Network Norway's reply of 9 May 2014 to the Authority's request for information of 28 March 2014 (response to question 3.2).

993. Second, the MVNO Ventelo, which was also active in the relevant market as from 2011, has explained that, although there were incremental costs related to offering MBB products, these costs were, as far as the Authority understands, higher for supplying business customers compared to residential customers.<sup>1248</sup> Moreover, and more importantly, Ventelo considered that the main commercial risk related to offering MBB services was the wholesale cost of data.<sup>1249</sup> The Authority further notes that, in its Reply to the SO, Telenor stated the following regarding Ventelo's operations in respect of stand-alone MBB: *"Indeed, Ventelo first launched MBB to business customers in May 2009 and then to residential customers in February 2011, and therefore has first-hand knowledge of the costs and efforts involved in such an expansion. A possible explanation of the limited incremental costs may be that Ventelo did not have a dedicated dealer network for the private segment, and a substantial part of the sales to this segment was done through Ventelo's own customer centre and web portal. Several other suppliers pursued a similar strategy for the consumer retail segment. Clearly, increasing sales activities through such channels could be implemented very quickly and at no or minimal additional costs."*<sup>1250</sup> The Authority concludes from this that Telenor agrees that Ventelo's incremental costs related to offering residential MBB products were relatively limited.
994. Third, the two largest SPs in Norway, namely Hello and Phonero, share the view of Ventelo and NwN that the incremental costs related to entering the MBB market were relatively limited. For example, Hello stated that: *"[t]he incremental cost of adding mobile broadband to our product spectre has been limited. (Cost of goods sold and sales cost have been significant, of course.) [...] The main risk associated with adding mobile broadband products to Hello's product spectre [sic] has been the product profitability given the margins (revenue minus cost of goods sold) and sales costs (seller commission, SIM cards, porting etc.) involved. Hello's end user prices are, to a large extent, dictated by market prices, since Hello is a small player in the market, and Hello's cost of goods sold has been set by a small number of network owners."*<sup>1251</sup> Similarly, according to Phonero, the total costs of goods sold is the crucial part of the incremental cost related to offering stand-alone MBB.<sup>1252</sup>
995. Fourth, Telenor itself has stated that there were limited incremental costs for providers switching from the supply of business to residential MBB: *"Moreover, since suppliers who offered mobile telephony services in the business market needed to include MBB in their portfolios offered to business customers, it is likely that their response to a SSNIP in the residential segment would be to supply MBB to such customers. The product could*

<sup>1248</sup> See Document No 708618: Ventelo's reply of 16 May 2014 to the Authority's request for information of 28 March 2014, response to questions 3.2 and 2.3.

<sup>1249</sup> See Document 708618: reply of 16 May 2014 the Authority's request for information of 28 March 2014, response to question 3.4.1.

<sup>1250</sup> Reply to the SO, page 47, where reference is made, in footnote 143, to Document No 783134, Ventelo's reply of 16 May 2014, page 3 (response to question 2.3).

<sup>1251</sup> See Document No 786244, Hello's reply of 5 May 2014, page 2 (response to questions 3.2 and 3.4), referred to by Telenor at paragraph 168 and in footnote 140 of its Reply to the SO.

<sup>1252</sup> See Phonero's reply of 5 May 2014 to the Authority's Request for Information (Document No 708039), response to question 3.2.

*easily and without significant incremental cost have been sold using the supplier's own customer centre, on the web or in third party sales channels.*"<sup>1253</sup>

996. Based on the above, the Authority concludes that Ventelo and the SPs were at least potential competitors on the relevant retail market. As set out in paragraph 776 above, the Authority no longer finds a margin squeeze infringement in relation to the spread between the wholesale MVNO tariffs charged to TDC and Telenor's retail prices for residential stand-alone MBB services. TDC is therefore no longer relevant in this context. On the basis of the evidence presented above, the Authority concludes that Ventelo and the SPs were at least potential competitors, within the meaning of the settled case law, throughout the Period under Consideration.

#### 10.5.2.5.5 Telenor's arguments that residential MBB was a small niche market

997. Telenor argues that MBB is and has always been a "small niche segment" and that therefore "even any theoretical effect would be marginal".<sup>1254</sup>

998. The Authority notes that this statement contradicts Telenor's own internal assessment during the Period under Consideration. In an internal presentation of 8 April 2008, Telenor stated the following regarding the importance of MBB services:<sup>1255</sup>

*"Mobile broadband is a focus area in Telenor Mobile.*

- *Mobile broadband is one of the Must Win Battles for Telenor in 2008:*
  - #5: *Coverage: Mobile broadband with operators like Netcom and Ice imply that Telenor must fight hard in order to maintain its position in respect of coverage.*
- *Concrete goals:*
  - *Subscription: Aim of 62 500 subscriptions EOY 2008 only in Consumer.*
  - *Market share target: 55 %.*
  - *Knowledge: That Telenor offers Mobile Broadband at 45 %."*

999. The Authority notes further that Ventelo reported that "[i]t was impossible not to offer MBB services when every market segment required delivery of such" and "[t]he lack of offers of MBB services would most probably have led to fewer customers, both as a result of reduced sales and increased churn, and would therefore have reduced profitability."<sup>1256</sup>

<sup>1253</sup> See reply to the SO, paragraph 170 (page 49).

<sup>1254</sup> See Reply to the SO, paragraph 512.

<sup>1255</sup> See "*Mobilt BB KTT*" (Document No 1097593), page 2; translation by the Authority.

<sup>1256</sup> Document No 783134, Ventelo's reply of 16 May 2014 to the Authority's request for information dated 28 March 2014, non-confidential version, replies to questions 3.3 and 3.4. In its Reply to the SO (paragraph 526), Telenor noted that, during the Period under Consideration, Ventelo entered the residential MBB market. According to Telenor, this is evidence that its conduct did not have exclusionary effects. The Authority disagrees. As noted in paragraphs 109, 179, 770, 762–765 and 893 above, MBB was an important and growing product in the battle for end users (despite being unprofitable) and, in the Authority's view, that explains why Ventelo entered the residential MBB market.

1000. Furthermore, as noted in paragraph 186, the Period under Consideration coincided with a critical growth phase for mobile data, and that first wave of growth in mobile data was initially most visible in stand-alone MBB services. As is clear from Figure 2 at paragraph 187 above, it was only in 2013 that MTDS overtook stand-alone MBB services in terms of mobile data volumes. Stand-alone MBB services therefore presented an important initial opportunity to build scale in mobile data traffic and, as can be seen from the internal presentation referred to in paragraph 998 above, Telenor indeed had ambitious market share targets in that regard.

1001. In any event, and irrespective of whether or not MBB was a niche market, the Authority notes that there is no *de minimis* threshold for practices falling within the scope of Article 54 EEA. In other words, once the Authority has established that the conduct of the dominant undertaking is likely to have an anti-competitive effect, it does not have to establish that such conduct is also of a “serious” or “appreciable” nature. The CJEU refers in this respect to the fact that competition is already weakened by the very presence of the dominant firm and to the latter’s special responsibility not to allow its behaviour to impair genuine, undistorted competition on the internal market.<sup>1257</sup>

#### 10.5.2.5.6 Telenor’s arguments regarding the counterfactual scenarios

1002. Telenor argues that assessing whether its conduct had anti-competitive effects requires specifying a realistic counterfactual, so that it is possible to compare consumer welfare in the actual and counterfactual scenarios.<sup>1258</sup> Telenor puts forward two counterfactual scenarios.

1003. First, Telenor argues that it could have increased the retail price for its stand-alone residential MBB products by an amount sufficient to avoid negative margins. According to Telenor, this increase would have directly harmed consumers during the Period under Consideration, without any compensating benefits to consumers in the long term, as the intensity of competition at the downstream level would not have changed.<sup>1259</sup>

1004. Second, Telenor argues that it could have lowered its wholesale tariffs, again by an amount sufficient to avoid any margin squeeze for data to be used in stand-alone residential MBB products while possibly increasing wholesale tariffs for other mobile communications services including MTDS, mobile voice and SMS/MMS services.<sup>1260</sup> According to Telenor, such a rebalancing of wholesale tariffs would not have changed any entry/exit decision of wholesale customers.<sup>1261</sup> As a result, the extent to which

<sup>1257</sup> Judgment of 6 October 2015, *Post Danmark*, C-23/14, EU:C:2015:651, paragraphs 63–74.

<sup>1258</sup> See, in particular, Section 8 of Annex 14 of the Reply to the SO (as well as paragraphs 32, 456 and 493 of the Reply to the SO).

<sup>1259</sup> See, in particular, Section 8.1 of Annex 14 of the Reply to the SO.

<sup>1260</sup> See, in particular, Section 8.2 of Annex 14 of the Reply to the SO.

<sup>1261</sup> This is because: (i) the wholesale input used by wholesale customers to supply stand-alone MBB is sold and purchased as part of a bundle of wholesale access services which allows the supply at the retail level of all types of mobile plans, including mobile telephony plans as well as stand-alone MBB plans; and (ii) wholesale customers take entry/exit decisions by looking at profitability in aggregate across all the retail services that they are able to supply; see paragraphs 197–199 of Annex 14 of the Reply to the SO.

consumers would benefit from a rebalancing of wholesale tariffs would have ultimately depended on whether wholesale price changes would be passed through into retail prices. In Telenor's view, there is no reason *a priori* to believe that changes in wholesale prices would have been passed through,<sup>1262</sup> in which case there would have been no effect on consumer welfare. Even if changes in wholesale prices would have been passed through, however, Telenor argues that subscribers of stand-alone MBB plans would have likely benefitted from lower retail prices, but at the expense of subscribers of other mobile communications services, in which case the overall impact on consumer welfare would have been mixed.<sup>1263</sup>

1005. The Authority disagrees with Telenor's arguments in relation to the counterfactual.

1006. First, the Authority considers that the appropriate counterfactual scenario in the present case is the competitive situation absent any margin squeeze. The Authority has shown in Sections 10.5.2.1-10.5.2.4 above that Telenor's conduct was likely to hinder, or was at least capable of hindering, as-efficient competitors across all three wholesale access levels (NROs, MVNOs and SPs) from entering or expanding in an evolving and fast-growing market. In the Authority's view, the negative gross margins potentially had a significant impact on the ability of such competitors to contribute important competitive pressure in the residential stand-alone MBB market during the Period under Consideration, as well as to contribute to sustainable competition in both the relevant retail and wholesale markets over the longer term. The Authority recalls that where gross margins are negative, as in the present case, the CJEU has found that an effect which is at least potentially exclusionary is probable.<sup>1264</sup> Absent the negative gross margins, the Authority considers that such competitors could have exerted important competitive pressure during a growth period in residential stand-alone MBB services, as well as building valuable scale in mobile data, to the ultimate benefit of Norwegian consumers both in the short-to-medium term and over the longer term.

1007. Second and in any event, the Authority considers that the counterfactual scenarios proposed by Telenor are deficient and inherently speculative, providing only a partial and static analysis of possible retail and/or wholesale price effects arising from it avoiding any margin squeeze.

1008. As regards Telenor's first counterfactual scenario, the Authority notes that, absent Telenor's margin squeeze, non-MNOs<sup>1265</sup> would have had access to economically viable inputs. This would have enabled them to compete actively in residential stand-alone MBB and improved competitive outcomes (e.g. retail prices) for consumers at retail

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<sup>1262</sup> For example, because, according to Telenor, access buyers were concerned with their overall profitability rather than with the profitability of particular retail plans that they supplied within their overall portfolio.

<sup>1263</sup> See paragraph 199 of Annex 14 of the Reply to the SO.

<sup>1264</sup> See Section 10.5.1.

<sup>1265</sup> i.e. NROs, MVNOs and SPs.

level. Indeed, non-MNOs have been recognised as bringing important competition on price and innovation in other mobile markets.<sup>1266</sup>

1009. As noted in paragraphs 890 and 891 above, the very purpose of wholesale access at SP, MVNO and NRO levels is to facilitate entry and expansion by mobile communications providers of differing size and infrastructure profiles. The objective of having such graduated wholesale access options is to facilitate direct competitive pressure on both price and non-price service features, as well as to support progressive investment and expansion by different access seekers with a view to them evolving into stronger competitors over time. However, as explained above, Telenor fails to take into account any dynamic competition benefits of having economically viable wholesale inputs available to SPs, MVNOS and NROs.
1010. In addition, as is clear from Figure 2 at paragraph 187 above, the Period under Consideration coincided with a critical growth phase for mobile data, and that first wave of growth in mobile data was initially taking place in stand-alone MBB services. It was only in 2013 that MTDS overtook stand-alone MBB services in terms of mobile data volumes. It is therefore reasonable to expect that, absent Telenor's margin squeeze, non-MNOs would have had incentives to compete with a view to building scale in mobile data traffic in this important initial growth phase.
1011. Further, the Authority notes that, even if Telenor had been able to raise retail prices for residential stand-alone MBB services as a result of lack of a competitive discipline from other MNOs, non-MNOs could have disciplined Telenor, absent Telenor's margin squeeze. In the Authority's view, this only underlines further the importance of non-MNOs having access to economically viable inputs to constrain Telenor's retail pricing behaviour during the Period under Consideration.
1012. Telenor's static viewpoint also completely neglects to take into account other non-price benefits that consumers in the relevant downstream market could have potentially enjoyed from increased competition from non-MNOs along dimensions other than price (such as on service quality and choice).
1013. As far as the second counterfactual scenario is concerned, the option was always open to Telenor to lower its wholesale tariffs (whether only for stand-alone MBB products or without distinguishing between stand-alone MBB plans and MTDS). Indeed, further to the Authority's assessment in paragraphs 1008 to 1010 above, this would have been the most realistic course of action for Telenor to avoid the margin squeeze.
1014. Telenor has not shown that any tariff rebalancing would be necessary. Further, Telenor's assumption that there would be no pass-through of wholesale tariff reductions for data inputs related to stand-alone MBB at all is entirely speculative. Moreover, even if such reductions were only partially passed through by the access seekers to consumers,<sup>1267</sup> consumers would have still unambiguously benefitted from those partial reductions in

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<sup>1266</sup> See footnote 1121 above.

<sup>1267</sup> The Authority notes that Telenor has failed to explain why such a pass-through – even partial – would not be possible in this case.

retail prices, as well as from improved competitive conditions through the avoidance of a margin squeeze.

1015. Moreover, in its counterfactual analysis, Telenor assumes that the arena of competition is broader than residential stand-alone MBB.<sup>1268</sup> However, as explained in Section 10.3.5 above, the relevant level of aggregation/arena of competition in this case is the relevant market at the retail level, namely residential stand-alone MBB, which is accordingly the subject of the Authority's effects assessment.

1016. On the basis of the above, the Authority rejects Telenor's counterfactual scenarios as unrealistic. Absent a margin squeeze, non-MNOs could have exerted important competitive pressure during a growth period in residential stand-alone MBB services, as well as building valuable scale in mobile data, to the ultimate benefit of Norwegian consumers both in the short-to-medium term and over the longer term.

#### 10.5.2.6 Conclusion

1017. The Authority concludes that, notwithstanding Telenor's arguments above, its conduct was likely to hinder or was at least capable of hindering the ability of actual or potential competitors at least as efficient as Telenor itself to trade on the retail market for the provision of stand-alone MBB services to residential customers in Norway.

### 10.6 Objective justification and efficiencies

1018. Exclusionary conduct can fall outside the prohibition in Article 54 EEA if the dominant undertaking can demonstrate that its conduct is objectively necessary or produces efficiencies which outweigh the negative effects on competition/consumers.<sup>1269</sup>

1019. Thus, the dominant undertaking concerned remains at liberty to demonstrate that its margin squeeze, albeit producing exclusionary effects, is economically justified. In that regard, it must be determined whether the exclusionary effects arising from such conduct, which are disadvantageous for competition, may be counterbalanced or outweighed by advantages in terms of efficiency which also benefit the consumer. If the exclusionary effects of the conduct bear no relation to the advantages for the market and consumers, or if the conduct goes beyond what is necessary in order to attain those advantages, it must be regarded as an abuse.<sup>1270</sup>

1020. The dominant undertaking has the burden of proving such objective necessity or efficiency defence.<sup>1271</sup>

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<sup>1268</sup> See footnote 1262 above and paragraphs 197–199 of Annex 14 of the Reply to the SO.

<sup>1269</sup> See judgment of 30 May 2018 in Case E-6/17 *Fjarskipti* [2018] EFTA Ct. Rep. 78, paragraph 69; see also judgment of 14 February 1978, *United Brands*, 27/76, EU:C:1978:22, paragraph 184; judgment of 6 October 1994, *Tetra Pak II*, T-83/91, EU:T:1994:246, paragraph 136; and judgment of 15 March 2007, *British Airways*, C-95/04 P, EU:C:2007:166, paragraphs 69 and 86.

<sup>1270</sup> Judgment of 17 February 2011, *TeliaSonera Sverige*, C-52/09, EU:C:2011:83, paragraphs 75–76, and judgment of 15 March 2007, *British Airways*, C-95/04 P, EU:C:2007:166, paragraphs 69 and 86.

<sup>1271</sup> Judgment of 17 September 2007, *Microsoft*, T-201/04, EU:T:2007:289, paragraph 688.

1021. The Authority is of the view that there is no objective justification for the foreclosure of competition at issue in this case. Moreover, Telenor has not made such a claim.

#### 10.7 Conclusion: margin squeeze practices between the wholesale tariffs for access and origination services on public mobile networks and the retail prices for stand-alone MBB services to residential customers in Norway

1022. Further to the above, the Authority concludes that Telenor abused its dominant position within the meaning of Article 54 EEA by engaging in margin squeeze practices in relation to the wholesale tariffs for access and origination services on public mobile telephone networks in Norway and the retail prices for stand-alone MBB services to residential customers in Norway. Specifically, the margin squeeze infringements related to: (i) the wholesale NRO tariffs charged to NwN from 1 August 2008 to 31 August 2010 (inclusive); (ii) the wholesale MVNO tariffs charged to Ventelo from 1 January 2008 to 30 November 2010 (inclusive); and (iii) the wholesale SP tariffs charged from 1 January 2008 to 31 December 2012 (inclusive).

### 11 EFFECT ON TRADE BETWEEN CONTRACTING PARTIES

1023. Article 54 EEA prohibits the abuse of a dominant position within the territory covered by the EEA Agreement or in a substantial part of it insofar as it “*may affect trade between Contracting Parties*”. It is settled case law that the basic test when assessing effect on trade is that “*it must be possible to foresee with a sufficient degree of probability on the basis of a set of objective factors of law or fact that the agreement or practice may have an influence, direct or indirect, actual or potential, on the pattern of trade between Contracting Parties.*”<sup>1272</sup> This test has three basic elements.

1024. First, the concept of “*trade between Contracting Parties*” covers all forms of economic activity, not just the exchanges of goods and services including establishment,<sup>1273</sup> and implies some cross-border element (i.e. that the situation is not purely internal to one EEA State). An effect on establishment occurs when the abusive conduct affects the decisive factors in the choice made by foreign undertakings (e.g. competitors) as to whether or not to establish themselves in the territory of a particular Contracting Party.<sup>1274</sup> According to settled case law, the concept of trade also encompasses the competitive structure covering, for example, abusive behaviour aimed at eliminating a

<sup>1272</sup> See judgment of 19 April 2016 in Case E-14/15 *Holship* [2016] EFTA Ct. Rep. 240, paragraph 75. See also judgment of 25 October 2001, *Ambulanz Glöckner*, C-475/99, EU:C:2001:577, paragraphs 48 and 49; judgment of 14 September 2017, *Autortiesību un komunikēšanās konsultāciju aģentūra / Latvijas Autoru apvienība*, C-177/16, EU:C:2017:689, paragraph 27; judgment of 16 July 2015, *ING Pensii*, C-172/14, EU:C:2015:484, paragraph 48; and paragraph 23 of the *Guidelines on the effect on trade concept contained in Articles 53 and 54 of the EEA Agreement* (“the Guidelines on effect on trade”), see OJ C 291, 30.11.2006, p. 46 and EEA Supplement to the OJ No 59, 30.11.2006, p. 18.

<sup>1273</sup> Judgment of 14 July 1980, *Züchner*, 172/80, EU:C:1981:178, paragraph 18; judgment of 19 February 2002, *Wouters*, C-309/99, EU:C:2002:98, paragraph 95; judgment of 25 October 2001, *Ambulanz Glöckner*, C-475/99, EU:C:2001:577, paragraph 49; and judgment of 21 January 1999, *Bagnasco*, C-215/96 and C-216/96, EU:C:1999:12, paragraph 51.

<sup>1274</sup> See, for example, judgment of 16 July 2015, *ING Pensii*, C-172/14, EU:C:2015:484, paragraph 51.

competitor operating in several Member States.<sup>1275</sup> Given the jurisdictional nature of the effect on trade concept, it is irrelevant whether the cross-border effects would result in a decrease or increase in the amount of trade between Contracting Parties.<sup>1276</sup> There must only be a change or alteration from the way trade would have developed; this suffices to trigger the application of the EEA competition rules.<sup>1277</sup>

1025. Second, it is sufficient that the abuse “*may affect trade*”,<sup>1278</sup> it is not necessary to prove actual effects. It only has to be shown that, based on objective factors, it is sufficiently probable that the practices are capable of having an effect<sup>1279</sup> or could have had an effect.<sup>1280</sup>

1026. Third, the effect on trade must be appreciable. This element requires that the effect on trade between Member States must not be insignificant and is assessed primarily with reference to the position and the importance of the undertaking(s) on the market for the products concerned.<sup>1281</sup>

1027. Where an undertaking, which holds a dominant position covering the whole of an EEA State engages in exclusionary abuses, trade between EEA States is normally capable of being affected.<sup>1282</sup> Such abusive conduct will generally make it more difficult for competitors from other EEA States to penetrate the market, in which case patterns of trade are capable of being affected.<sup>1283</sup> In its decisional practice related to margin squeeze cases and other exclusionary practices in the telecoms sector, the European Commission considered that raising barriers to entry and thereby restricting establishment by

<sup>1275</sup> Judgment of 21 February 1973, *Europemballage Corporation and Continental Can Company*, 6/72, EU:C:1973:22, paragraph 16; and judgment of 8 October 1996, *Compagnie maritime belge transports*, T-24/93, T-25/93, T-26/93 and T-28/93, EU:T:1996:139, paragraph 203.

<sup>1276</sup> See, for example, judgment of 6 April 1995, *Tréfileurope*, T-141/89, EU:T:1995:62, paragraph 57.

<sup>1277</sup> See, for example, judgment of 2 July 1992, *Dansk Pelsdyravlerforening*, T-61/89, EU:T:1992:79, paragraph 143; and judgment of 28 February 2002, *Atlantic Container Line*, T-395/94, EU:T:2002:49, paragraph 81.

<sup>1278</sup> Judgment of 19 April 2016 in Case E-14/15 *Holship* [2016] EFTA Ct. Rep. 240, paragraph 75.

<sup>1279</sup> Judgment of 6 April 1995, *RTE and ITP*, C-241/91 P and C-242/91 P, EU:C:1995:98, paragraph 69.

<sup>1280</sup> See judgment of 24 September 2009, *Erste Group Bank*, C-125/07 P, C-133/07 P, C-135/07 P, C-137/07 P, EU:C:2009:576, paragraph 46. See also judgment of 14 December 2006, *Raiffeisen Zentralbank Österreich*, T-259/02 to T-264/02 and T-271/02, EU:T2006:396, paragraph 166, where the GCEU expressly rejected the argument that the absence of any actual effects following a past infringement should be taken into account when assessing the effect on trade criteria. The GCEU held that capability, or in other words a potential effect, is sufficient to establish the jurisdiction of EU competition rules. See further paragraph 26 of the Guidelines on effect on trade.

<sup>1281</sup> Judgment of 17 January 2006 in Case E-4/05 *HOB-vin* [2006] EFTA Ct. Rep. 4, paragraph 49; judgment of 19 April 2016 in Case E-14/15 *Holship* [2016] EFTA Ct. Rep. 240, paragraph 76; judgment of 9 July 1969, *Völk*, 5/69, EU:C:1969:35.

<sup>1282</sup> Judgment of 1 April 1993, *BPB Industries and British Gypsum*, T-65/89, EU:T:1993:31, paragraph 135; see also judgment of 9 November 1983, *Michelin*, 322/81, EU:C:1983:313; and judgment of 25 March 1981, *Coöperatieve Stremsel- en Kleurselfabriek*, 61/80, EU:C:1981:75, where in the case of exclusionary abuses covering a whole State an effect on trade was established. See further the Guidelines on effect on trade, paragraph 93.

<sup>1283</sup> The Guidelines on effect on trade, paragraph 93.

companies from other Member States amounted to an effect on trade.<sup>1284</sup> The finding of an effect on trade in these cases was not challenged in any of the respective appeal procedures before the European Courts.

1028. As noted in Section 9.4 above, both relevant markets identified in this Decision cover the entire territory of Norway and constitute in themselves substantial parts of the EEA. Telenor had a dominant position covering the entire territory of Norway during the Period under Consideration (See Section 9.2). The relevant wholesale and retail markets affected by the margin squeeze practices were also national in scope. These practices affected the market structure by raising barriers to entry to the market for the provision of stand-alone MBB services to residential customers in Norway.

1029. Considering the above, the margin squeeze practices described in Section 10.4 constitute in themselves a significant obstacle to the possibility for companies active in other EEA States to establish themselves in Norway. Thus, Telenor's abuse of its dominant position on the relevant market was capable of appreciably affecting trade between Contracting Parties within the meaning of Article 54 EEA.

## 12 CONCLUSION ON ARTICLE 54 EEA

1030. In light of the foregoing, the Authority concludes that Telenor has abused its dominant position in the wholesale market for access and origination services on public mobile telephone networks in Norway by engaging in margin squeeze practices in relation to the wholesale prices for access and origination services on public mobile telephone networks in Norway and the retail prices for stand-alone MBB services to residential customers in Norway.

1031. The Authority has found that, during the Period under Consideration, the spread between the tariffs charged upstream by Telenor to competitors for the supply of wholesale access and origination services on its public mobile telephone network, and the prices charged by Telenor to its own customers at the downstream level for residential stand-alone MBB services in Norway, did not allow equally efficient or as-efficient competitors, relying on such wholesale services, to compete with Telenor in the downstream market without incurring a loss.

1032. In particular, the margin squeeze infringements related to: (i) the wholesale NRO tariffs charged to NwN from 1 August 2008 to 31 August 2010; (ii) the wholesale MVNO tariffs charged to Ventelo from 1 January 2008 to 30 November 2010; and (iii) the wholesale SP tariffs charged from 1 January 2008 to 31 December 2012.

1033. Telenor's behaviour amounts to three separate infringements of Article 54 EEA.

## 13 DURATION

1034. As recalled in Section 10.4.5 above, the duration of each infringement is as follows:

<sup>1284</sup> See *Deutsche Telekom* Decision, paragraph 185; *Telefónica* Decision, paragraph 697; *Slovak Telekom* Decision, paragraph 1109; Commission Decision of 16 July 2003 in Case COMP/38.233 – *Wanadoo*, paragraph 392; and Commission Decision of 22 June 2011 in Case AT.39525 – *Telekomunikacja Polska*, paragraph 887.

- (i) from 1 August 2008 until 31 August 2010 in the case of the wholesale NRO tariffs charged to NwN;
- (ii) from 1 January 2008 until 30 November 2010 in the case of the wholesale MVNO tariffs charged to Ventelo; and
- (iii) from 1 January 2008 until 31 December 2012 in the case of the wholesale tariffs charged to SPs.

#### 14 ADDRESSEES

1035. The subjects of the EEA competition rules are undertakings, an autonomous concept of competition law, which is not identical with that of corporate legal personality for the purposes of national commercial or fiscal law. The undertaking that participated in the infringement is therefore not necessarily identical to the precise legal entity within the group of companies whose representatives actually took part in the infringement. The term “undertaking” is not defined in the EEA Agreement. It may refer to any entity engaged in commercial activities, regardless of the legal status of the entity and of the way in which it is financed.<sup>1285</sup> The case law has confirmed that Articles 53 and 54 EEA are aimed at economic units which consist of a unitary organisation of personal, tangible and intangible elements which pursue a specific economic aim on a long-term basis and can contribute to the commission of an infringement of the kind referred to in those provisions.<sup>1286</sup>

1036. First, it falls, in principle, to the natural or legal person managing the undertaking in question when the infringement was committed to answer for that infringement.<sup>1287</sup> Thus, when an undertaking that has committed an infringement of the competition rules of the EEA Agreement subsequently disposes of the assets which contributed to the infringement and withdraws from the market in question, it continues to be answerable for the infringement if it has not ceased to exist.<sup>1288</sup>

1037. Liability for illegal behaviour may pass to a successor where the corporate entity which committed the infringement has ceased to exist. If the legal person initially answerable for the infringement ceases to exist and loses its legal personality, being purely and simply absorbed by another legal entity, that latter entity must be held answerable for the whole period of the infringement and thus is liable for the activity of the entity that was absorbed.<sup>1289</sup> The same can apply where the initial operator remains in existence but is

<sup>1285</sup> Judgment of 5 March 2015, *Versalis*, C-93/13 P and C-123/13 P, EU:C:2015:150, paragraph 52; and judgment of 23 April 1991, *Höfner and Elser*, C-41/90, EU:C:1991:161, paragraph 21.

<sup>1286</sup> Judgment of 12 December 2007, *Akzo Nobel*, T-112/05, EU:T:2007:381, paragraphs 57–58; judgment of 10 March 1992, *Shell*, T-11/89, EU:T:1992:33, paragraph 311; and judgment of 14 May 1998, *Mo och Domsjö*, T-352/94, EU:T:1998:103, paragraphs 87–96.

<sup>1287</sup> Judgment of 29 March 2011, *ThyssenKrupp Nirosta*, C-352/09 P, EU:C:2011:191, paragraph 143; and judgment of 16 November 2000, *Cascades*, C-279/98 P, EU:C:2000:626, paragraph 78.

<sup>1288</sup> Judgment of 17 December 1991, *Enichem Anic*, T-6/89, EU:T:1991:74 paragraph 236; and judgment of 8 July 1999, *Anic Partecipazioni*, C-49/92 P, EU:C:1999:356, paragraph 145.

<sup>1289</sup> Judgment of 16 November 2000, *Cascades*, C-279/98 P, EU:C:2000:626, paragraphs 78 and 79.

no longer active on the relevant market, if this is the result of a restructuring within a group of companies that constitute one economic entity.<sup>1290</sup>

1038. In the case at hand, as indicated in Section 2 above, Telenor Mobil AS was responsible for all wholesale and retail mobile operations in Norway during the period of 2006–2009. Telenor Mobil AS was incorporated under Norwegian law and wholly owned by Telenor Mobile Holding AS, which in turn was wholly owned by Telenor ASA. As of 2010 Telenor Norge AS took over the Norwegian mobile operations from Telenor Mobil AS which is no longer active on the relevant markets. Telenor Norge AS was owned during the remainder of the Period under Consideration by Telenor Mobile Holding AS (56%) and Telenor Networks Holding AS (44%), both wholly-owned companies of the same Telenor ASA as in the case of Telenor Mobil AS.<sup>1291</sup> As mentioned above, where the initial operator remains in existence but is no longer active on the relevant market, the successor must be held responsible for the whole period of the infringement.<sup>1292</sup> Telenor Norge AS is therefore directly liable for the infringements in this case also for the period before 2010.

1039. Therefore, this Decision is addressed to Telenor Norge AS, in its capacity as the legal entity that took over responsibility for the infringements by Telenor Mobil AS for the period before 1 January 2010, and as the company which directly participated in the infringements addressed by this Decision for the period starting on 1 January 2010.

1040. Second, the anti-competitive conduct of an undertaking can be attributed to another undertaking where the undertaking directly participating in the infringement has not decided independently upon its own conduct on the market, but carried out, in all material respects, the instructions given to it by that other undertaking having regard in particular to the economic links between them.<sup>1293</sup> In the case of wholly-owned (or almost wholly-owned) subsidiaries, the infringement committed by a wholly-owned subsidiary is also attributable to the parent company, as the parent company is presumed to have exercised decisive influence over its wholly-owned subsidiary.<sup>1294</sup> This presumption can be

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<sup>1290</sup> Judgment of 5 March 2015, *Versalis*, C-93/13 P and C-123/13 P, EU:C:2015:150, paragraph 53; judgment of 13 June 2013, *Versalis*, C-511/11 P, EU:C:2013:386, paragraph 52; judgment of 11 December 2007, *ETI*, C-280/06, EU:C:2007:775, paragraphs 48 and 49; judgment of 7 January 2004, *Aalborg Portland*, C-204/00 P, C-205/00 P, C-211/00 P, C-213/00 P, C-217/00 P and C-219/00 P, EU:C:2004:6, paragraphs 59 and 357; and judgment of 30 September 2009, *Hoechst*, T-161/05, EU:T:2009:366 at paragraphs 50–52.

<sup>1291</sup> See Document No 726991, e-mail from Telenor of 27 October 2014 with an overview of the company structure of Telenor. The Authority understands, on the basis of publicly available sources, that Telenor Norge AS is currently wholly owned by Telenor Networks Holding AS, which is still owned 100 % by Telenor ASA; see: <<https://www.proff.no/roller/telenor-norge-as/fornebu/telekommunikasjon/IGSNT1R01PE/>>, accessed June 2020.

<sup>1292</sup> See footnote 1290 above.

<sup>1293</sup> See in particular judgment of 13 December 2018, *Slovak Telekom*, T-851/14, EU:T:2018:929, paragraphs 280–288 and the case law cited there; judgment of 16 November 2000, *Metsä-Serla*, C-294/98 P, EU:C:2000:632, paragraph 27; judgment of 25 October 1983, *AEG*, 107/82, EU:C:1983:293, paragraph 49; and judgment of 14 July 1972, *ICI*, 48/69, EU:C:1972:70, paragraphs 132–133.

<sup>1294</sup> Judgment of 10 September 2009, *Akzo Nobel*, C-97/08 P, EU:C:2009:536, paragraph 77 (compare also the opinion of AG Kokott of 23 April 2009, *Akzo Nobel*, C-97/08 P EU:C:2009:262 at paragraphs 97–99); judgment of 15 June 2005, *Tokai Carbon*, T-71/03, T-74/03, T-87/03 and T-91/03, EU:T:2005:220, paragraph 60; judgment of 14 May 1998, *Stora Kopparbergs Bergslags*, T-354/94, EU:T:1998:104, paragraph 80, upheld on appeal in C-

rebutted by producing sufficient evidence to show that the subsidiary decided independently on its own conduct on the market.<sup>1295</sup>

1041. The Authority notes that Telenor Mobil AS was wholly owned by Telenor Mobile Holding AS which in turn was wholly owned by Telenor ASA. The Authority also notes that Telenor Norge AS was a subsidiary of Telenor Mobile Holding AS (56%) and Telenor Networks Holding AS (44%),<sup>1296</sup> which in turn were wholly-owned subsidiaries of the same Telenor ASA throughout the remainder of the Period under Consideration. Thus, on the basis of the case law referred to above, Telenor ASA is presumed to have exercised decisive influence over its wholly-owned subsidiaries Telenor Mobil AS and Telenor Norge AS and, therefore, is also directly responsible for the infringements from 1 January 2008 as parent company with a 100% ownership of the companies owning Telenor Mobil AS and Telenor Norge AS. Therefore, this Decision is also addressed to Telenor ASA.

1042. On the basis of the above, this Decision is addressed as jointly and severally liable entities to:

- Telenor Norge AS from 1 January 2008 until the end of 2012 by virtue of it being the successor of Telenor Mobil AS for the years 2008–2009 and by virtue of its direct participation in the infringements in the period from January 2010 until the end of 2012; and
- Telenor ASA as a result of its decisive influence, during the period from 1 January 2008 until the end of 2012, over its wholly-owned subsidiaries, Telenor Mobile Holding AS and Telenor Networks Holding AS which, during that time, in turn owned Telenor Mobil AS and Telenor Norge AS.

## 15 REMEDIES AND FINES

### 15.1 Article 7(1) of Chapter II of Protocol 4 to the Surveillance and Court Agreement

1043. Article 7(1) of Chapter II of Protocol 4 to the Surveillance and Court Agreement provides that, where the Authority finds that there is an infringement of Article 53 or 54 EEA, it may by decision require the undertakings concerned to bring such infringement to an end. For this purpose, it may also impose on the undertakings concerned any behavioural or structural remedies which are proportionate to the infringement committed and necessary to bring the infringement effectively to an end. If the Authority has a legitimate interest in doing so, it may also find that an infringement has been committed in the past.<sup>1297</sup>

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286/98 P, EU:C:2000:630, paragraphs 27–29; and judgment of 25 October 1983, *AEG*, 107/82, EU:C:1983:293, paragraph 50.

<sup>1295</sup> Judgment of 10 September 2009, *Akzo Nobel*, C-97/08 P, EU:C:2009:536, paragraphs 58–60. See also judgment of 19 July 2012, *Alliance One International and Standard Commercial Tobacco*, C-628/10 P, EU:C:2012:479; judgment of 27 October 2010, *Alliance One International*, T-24/05, EU:T:2010:453.

<sup>1296</sup> See footnote 1291 above.

<sup>1297</sup> A legitimate interest does not need to be shown where, as here, a fine is imposed, including where it relates to an infringement committed in the past. See judgment of 25 July 2018, *Orange Polska*, C-123/16 P,

1044. At the time of the adoption of this Decision, Telenor's abuse of its dominant position has ended with regard to all three infringements. The infringements lasted:

- (1) from 1 August 2008 until 31 August 2010 in the case of the wholesale NRO tariffs charged to NwN;
- (2) from 1 January 2008 until 30 November 2010 in the case of the wholesale MVNO tariffs charged to Ventelo; and
- (3) from 1 January 2008 until 31 December 2012 in the case of the wholesale tariffs charged to SPs.

1045. The dates in the previous paragraph reflect the Authority's conclusions on the margin squeeze assessment, as explained in Section 10.4.5 above.

1046. Telenor should, however, be required to refrain from repeating the conduct described in this Decision and from any act or conduct that would have the same or equivalent object or effect as the conduct described in this Decision.

## 15.2 Article 23(2) of Chapter II of Protocol 4 to the Surveillance and Court Agreement

1047. Article 23(2)(a) of Chapter II of Protocol 4 to the Surveillance and Court Agreement provides that the Authority may by decision impose fines on undertakings, where, either intentionally or negligently, they infringe Article 54 EEA.

1048. An infringement of Article 54 EEA is committed intentionally or negligently where the undertaking concerned cannot be unaware of the anti-competitive nature of its conduct, whether or not it was aware that it was infringing the competition rules of the EEA Agreement.<sup>1298</sup> An undertaking is aware of the anti-competitive nature of its conduct where it is aware of the essential facts justifying both the finding of a dominant position on the relevant market and the finding by the Authority of an abuse of that dominant position.<sup>1299</sup>

1049. It appears from the facts as described above (see in particular Section 10.5.2.2) that, contrary to what Telenor claims,<sup>1300</sup> Telenor committed the infringements intentionally

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EU:C:2018:590, paragraphs 58-60. See also judgment of 2 March 1983, *GVL*, 7/82, EU:C:1983:52, paragraph 23; judgment of 15 July 1970, *Chemiefarma*, 41/69, EU:C:1970:71, paragraph 175, and judgment of 6 October 2005, *Sumitomo Chemical*, T-22/02 and T-23/02, EU:T:2005:349, paragraph 37.

<sup>1298</sup> See judgment of 18 April 2012 in Case E-15/10 *Posten Norge* [2012] EFTA Ct. Rep. 246, paragraphs 271-274; judgment of 10 April 2008, *Deutsche Telekom*, T-271/03, EU:T:2008:101, paragraph 295, upheld on appeal in judgment of 14 October 2010, *Deutsche Telekom*, C-280/08 P, EU:C:2010:603, paragraph 124; judgment of 29 March 2012, *Telefónica*, T-336/07, EU:T:2012:172, paragraph 319, upheld on appeal in judgment of 10 July 2014, *Telefónica*, C-295/12 P, EU:C:2014:2062, paragraph 156; and judgment of 8 September 2016, *Lundbeck*, T-472/13, EU:T:2016:449, paragraph 762.

<sup>1299</sup> See judgment of 9 November 1983, *Michelin*, 322/81, EU:C:1983:313, paragraph 107; judgment of 29 March 2012, *Telefónica*, T-336/07, EU:T:2012:172, paragraph 320; and judgment of 12 June 2014, *Intel*, T-286/09, EU:T:2014:547, paragraph 1601.

<sup>1300</sup> See Reply to the SO, paragraphs 533-542; and Reply to the SSO, paragraphs 300-301.

or at least negligently. Telenor should have been aware that its practices infringed Article 54 EEA.

1050. This is because Telenor could or should not have been unaware of the fact that it held a dominant position in the wholesale market for access and origination services on public mobile telephone networks in Norway (see Section 9.2 above). Telenor ought to have been familiar with the principles governing market definition in competition cases. Telenor could not have been unaware of the likely effects of its margin squeeze practices on the retail market for stand-alone MBB services to residential customers in Norway.<sup>1301</sup> Furthermore, Telenor could not have been unaware that such conduct was liable to cause harm to competition in general and to potential competitors and to consumers. The European Commission, supported by the European Courts, has repeatedly condemned practices by undertakings in a dominant position that abusively squeeze the margins of their competitors with regard to prices applied at the wholesale level in combination with the prices in the retail market.<sup>1302</sup>

1051. The fact that Telenor was subject to regulation “specifically designed to prevent margin squeeze”<sup>1303</sup> in certain areas of its activities, and that it also regularly self-assessed its activities, does not change the Authority’s finding with regard to intent and negligence in paragraph 1049 above. It is settled case law that, even in the presence of sector-specific regulation, where an undertaking could not have been unaware that it had the genuine scope to set prices, and in this way the ability to eliminate or reduce a margin squeeze, the condition that the infringement is committed intentionally or negligently will be met.<sup>1304</sup>

### 15.3 Calculation of the fines

1052. Pursuant to Article 23(3) of Chapter II of Protocol 4 to the Surveillance and Court Agreement, in fixing the amount of the fines, the Authority must have regard to the gravity and to the duration of the infringement. In doing so, the Authority will set the fines at a level sufficient to ensure deterrence.

1053. The Authority’s general methodology for determining the level of the fines is set out in the Guidelines on the method of setting fines (“the Guidelines on fines”).<sup>1305</sup>

<sup>1301</sup> See in particular paragraphs 898–899 above.

<sup>1302</sup> Judgment of 14 October 2010, *Deutsche Telekom*, C-280/08 P, EU:C:2010:603, paragraph 183; judgment of 17 February 2011, *TeliaSonera Sverige*, C-52/09, EU:C:2011:83, paragraph 31; judgment of 10 July 2014, *Telefónica*, C-295/12 P, EU:C:2014:2062, paragraph 75; see also judgment of 30 May 2018 in Case E-6/17 *Fjaraskipti* [2018] EFTA Ct. Rep. 78, paragraph 58; judgment of 30 November 2000, *Industrie des poudres sphériques*, T-5/97, EU:T:2000:278; *Deutsche Telekom* Decision, paragraph 107; *Telefónica* Decision, paragraphs 281–284; and *Slovak Telekom* Decision, paragraph 823.

<sup>1303</sup> Reply to the SO, paragraph 537.

<sup>1304</sup> Judgment of 10 April 2008, *Deutsche Telekom*, T-271/03 EU:T:2008:101, paragraph 296; and judgment of 14 October 2010, C-280/08 P *Deutsche Telekom*, EU:C:2010:603, paragraph 127.

<sup>1305</sup> See Guidelines on the method of setting fines imposed pursuant to Article 23(2) of Chapter II of Protocol 4, OJ C 314, 21.12.2006, p. 84, and EEA Supplement to the OJ No 63, 14.12.2006, p. 44. See also the Commission’s Guidelines on the method of setting fines imposed pursuant to Article 23(2)(a) of Regulation (EC) No 1/2003, OJ

1054. The Authority first determines a basic amount for the undertaking in question. That amount consists of an amount of up to 30% of the undertaking's value of sales of goods or services to which the infringement is directly or indirectly related in the relevant geographic market (see Section 15.3.1.1 below). The choice of a given percentage will depend on the degree of gravity of the infringement (see Section 15.3.1.2 below). The proportion of the value of sales resulting from that percentage will then be multiplied by the duration of the infringement (see Section 15.3.1.3 below). The Authority may also include in the basic amount an additional amount corresponding to a percentage of the value of sales which may be set at a level of up to 25% of the value of sales (see Section 15.3.1.4 below).
1055. The Authority may then adjust the basic amount up or down to take into account either aggravating or mitigating circumstances (see Section 15.3.2.1 below).
1056. The Authority pays particular attention to the need to ensure that fines have a sufficient deterrent effect. To that end, it may increase the fine to be imposed on undertakings which have a particularly large turnover beyond the sales of goods or services to which the infringement relates (see Section 15.3.2.2 below).
1057. The final amount of the fine shall not exceed 10% of the total turnover of the undertaking participating in the infringement relating to the business year preceding the date of adoption of the Authority's decision.
1058. The particularities of a given case, or the need to achieve deterrence in a particular case, may justify departing from the general methodology for the setting of fines.<sup>1306</sup>

### **15.3.1 Basic amounts of the fines**

#### **15.3.1.1 The value of sales**

##### **15.3.1.1.1 Value of sales related to the relevant wholesale and retail markets**

1059. The three margin squeeze infringements established in this Decision relate to: (i) Telenor's wholesale access and origination services on public mobile telephone networks in Norway, and (ii) Telenor's retail provision of stand-alone MBB services to residential customers in Norway.
1060. Table 11 below sets out Telenor's sales in the relevant market for wholesale access and origination services on public mobile telephone networks in Norway and the relevant retail market for the provision of stand-alone MBB services to residential customers in Norway separately, as well as aggregated, for the Period under Consideration.

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C 210, 1.9.2006, p. 2. In view of a clerical error in the numbering of the Authority's Guidelines on fines, the Authority follows, for the purposes of this Decision, the numbering as originally intended (and as reflected in the Commission's Guidelines on fines).

<sup>1306</sup> Guidelines on fines, paragraph 37.

Table 11

	Wholesale (in thousand EUR)	Retail (in thousand EUR)	Total sales (in thousand EUR)
2008	96 081	11 988	108 069
2009	108 635	25 992	134 627
2010	119 310	36 553	155 863
2011	113 410	41 926	155 336
2012	122 238	49 343	171 581

Source: Telenor's response to the request for information of 30 April 2020<sup>1307</sup>

1061. The present case concerns infringements in the form of margin squeeze practices where Telenor abused its dominant position in the wholesale market for access and origination services on public mobile telephone networks by setting prices at the wholesale and retail levels that did not allow as-efficient competitors on the retail level to enter or compete profitably on that downstream market. The infringements relate notably to all three levels of wholesale access on Telenor's mobile network, i.e. NRO, MVNO and SP levels. As noted in paragraphs 890 and 891 above, the objective of having such graduated wholesale access options is to facilitate entry and expansion by different types of access seekers with a view to each category contributing a form of competitive discipline in the retail market, and potentially also in the wholesale market over time. The Authority therefore considers that Telenor's wholesale and retail sales are both directly related to the infringements. At the very least, the retail sales are indirectly related to the infringements which were made possible by virtue of Telenor's dominant position in the wholesale market.

1062. Telenor argues that only the sales related to the retail market should be taken into account, as the reason for using the value of sales for the purposes of calculating fines is that those figures have some correlation with the potential effects of the infringement.<sup>1308</sup> However, that argument must be rejected. The Guidelines on fines do not refer to effects in relation to value of sales. They provide instead: "*the combination of value of sales and duration of the infringement is used because they provide an appropriate proxy to reflect the economic importance of the infringement [...]*".<sup>1309</sup> The application of a margin squeeze results from the fact that Telenor, as a vertically-integrated MNO with dominance on the relevant upstream market, had the ability and incentives to squeeze the margins available to competitors between the relevant upstream and downstream markets. The value of sales for both relevant markets thus necessarily reflects the overall economic importance of the infringements in this particular case.

<sup>1307</sup> See Document No 1133372: Telenor's reply of 15 May 2020 to the Authority's request for information of 30 April 2020, Table 1 and Table 4.

<sup>1308</sup> Reply to the SO, paragraph 545.

<sup>1309</sup> Guidelines on fines, paragraph 6.

1063. Telenor argues further that, should wholesale revenues be included in the relevant value of sales, the figures must be reduced in two ways.<sup>1310</sup> First, since Telenor was allegedly not dominant in the supply of access and origination services to SPs, sales related to SPs should be disregarded. Second, Telenor argues that it is incorrect to include all wholesale market revenues, when the alleged conduct concerned the supply of wholesale data for stand-alone MBB to residential consumers only and also did not concern wholesale sales to TDC. Telenor claims that there is no link between the alleged abuse and Telenor's sales in the wholesale market with regard to voice and mobile data for mobile telephony subscriptions, which were used as inputs for different downstream retail markets.
1064. The Authority considers that these arguments must be rejected. First, the Authority concludes (see Section 8.2.2 above) that the relevant wholesale market should not be further segmented based on the type of wholesale access seeker. Second, the relevant wholesale market encompasses all types of wholesale services, which were purchased and provided in a bundle, irrespective of the retail services provided downstream on the basis of this wholesale input (see paragraphs 144, 145 and 148 above). The revenues concerned were generated on the wholesale market for access and origination services on public mobile telephone networks in Norway and the abuse concerns directly (or at least indirectly) the entirety of those sales due to their sale in a bundle (see Section 8.2.1 above). This approach is consistent with paragraph 13 of the Guidelines on fines, as it includes only values of sales directly or indirectly related to the infringement. Further, it is not in contradiction with the general legal limitation on the calculation of fines in Article 23(2) of Chapter II Protocol 4 to the Surveillance and Court Agreement.
1065. However, for the three separate infringements the Authority considers it appropriate to take into account from the relevant wholesale values of sales only the value of sales related to the undertaking(s) who were charged the tariffs concerned by the particular infringement. Therefore, in the case of the infringement related to the wholesale NRO tariffs charged to NwN, the relevant wholesale value of sales is the wholesale revenue generated by NwN, for the infringement related to the wholesale MVNO tariffs charged to Ventelo, the Authority has taken the wholesale revenue generated by Ventelo and for the infringement related to the wholesale tariffs charged to SPs, the Authority has taken the wholesale revenue generated by SPs.
1066. Table 12 below sets out the wholesale values of sales related to NwN, Ventelo and SPs in the Period under Consideration.

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<sup>1310</sup> Reply to the SO, paragraph 548.

**Table 12**

	NwN (in thousand EUR)	Ventelo (in thousand EUR)	SPs (in thousand EUR)
2008	17 821	28 539	19 216
2009	62 109	33 073	7 862
2010	63 382	40 133	10 208
2011	58 458	32 473	16 789
2012	68 603	25 989	22 333

Source: Telenor's response to the request for information of 30 April 2020<sup>1311</sup>

#### 15.3.1.1.2 *Value of sales related to the last full business year of the participation in the infringement*

1067. The Authority normally takes into account the sales made by an undertaking during the last full business year of its participation in the infringement.<sup>1312</sup> Telenor disagrees with this approach. It proposes that an average value of annual sales for the years of the infringements be used.<sup>1313</sup>

1068. Contrary to what Telenor proposes, the Authority takes the view that in the present case there are no exceptional reasons to deviate from the basic principle that the fine should be based on the turnover of the last full business year of the participation in each of the infringements. Using the turnover of the last full business year is the basic rule provided by the Guidelines on fines; any deviation should be exceptional and even if such an exception may be made, it is not a legal requirement.<sup>1314</sup> The Authority considers that the last full business year turnover figures are representative of the capability of the infringements to distort competition.

1069. Moreover, the growth rate between the relevant years for the individual infringements was not exponential, nor did the market grow beyond normal market growth rates at the time of the infringements. Therefore, the last full business year of Telenor's participation in each of the infringements reflects the economic reality at the time when Telenor committed the infringements because it takes account of the size and economic strength of Telenor and the scope of the infringements.<sup>1315</sup>

<sup>1311</sup> See Document No 1133372: Telenor's reply of 15 May 2020 to the Authority's request for information of 30 April 2020, Table 2.

<sup>1312</sup> Guidelines on fines, paragraph 13.

<sup>1313</sup> Reply to the SO, paragraphs 549–550.

<sup>1314</sup> See Commission Decision of 22 June 2011 in Case AT.39525 – *Telekomunikacja Polska*, paragraph 896.

<sup>1315</sup> Judgment of 11 July 2014, *Esso*, T-540/08 EU:T:2014:630, paragraph 95; judgment of 11 July 2014, *RWE and RWE Dea*, T-543/08 EU:T:2014:627, paragraph 218; judgment of 17 December 2014, *Pilkington Group*, T-

1070. The basic amounts of the fines will be calculated by reference to Telenor's value of sales in 2009 with regard to the infringements related to the wholesale NRO tariffs charged to NwN and the wholesale MVNO tariffs charged to Ventelo and by reference to the value of sales in 2012 with regard to the infringement related to the wholesale tariffs charged to the SPs.

#### 15.3.1.1.3 Conclusion on the relevant values of sales

1071. As established in Section 10.4.5, the Authority has found Telenor to have committed three separate infringements. Considering Article 23(2) of Chapter II of Protocol 4 to the Surveillance and Court Agreement, and in line with the Guidelines on fines, separate fines should be imposed for each of those infringements.

1072. Therefore, the Authority takes into account as the values of sales for the three separate infringements the relevant undertaking-specific wholesale values of sales and the retail values of sales in the relevant last full business year of the participation in the infringement. Table 13 below sets out the relevant values of sales related to the infringements concerning the wholesale NRO tariffs charged to NwN, the wholesale MVNO tariffs charged to Ventelo and the wholesale tariffs charged to SPs.

**Table 13**

	Wholesale value of sales (in thousand EUR)	Retail value of sales (in thousand EUR)	Total value of sales (in thousand EUR)
NRO tariff - NwN (2009)	62 109	25 992	88 101
MVNO tariff - Ventelo (2009)	33 073	25 992	59 065
SP tariff (2012)	22 333	49 343	71 676

#### 15.3.1.2 Gravity of the infringement

1073. The Authority concludes that the proportion of the value of sales to be used to establish the basic amounts of the fines should be 10%.

1074. In reaching this conclusion, the Authority has taken into account the following factors based on paragraph 22 of the Guidelines on fines.

1075. First, the infringements concern an abuse of dominance in the form of a margin squeeze. Margin squeeze practices by undertakings in a dominant position have been repeatedly

condemned by the European Commission and the EU Courts.<sup>1316</sup> The EFTA Court has also confirmed margin squeeze as a breach of Art 54 EEA in the *FjarSKIPTI* case.<sup>1317</sup> The scope of Article 102 TFEU and therefore Article 54 EEA is clear in this regard; there is no novelty in relation to margin squeeze abuses.

1076. Second, the residential stand-alone MBB market played an important and growing role in the Period under Consideration. MBB was a focus area for Telenor<sup>1318</sup> and was of considerable economic importance for mobile data consumption in Norway at that time.<sup>1319</sup> This means that any anti-competitive behaviour on this market was likely to have had a considerable impact in the Period under Consideration.

1077. Third, throughout the duration of the infringements, Telenor held a dominant position in the wholesale market for access and origination services on public mobile telephone networks in Norway (see Section 9.2), based on several factors, including high and stable market shares (between 63 and 71%). During this period, Telenor also had a high degree of market power in the retail market for the provision of stand-alone MBB services to residential customers in Norway, with a market share of 46.4–52.5% (see Section 9.3 above).

1078. Fourth, Telenor's conduct covered the whole territory of Norway.

1079. Fifth, the Authority's conclusion that the proportion of the value of sales to be used to establish the basic amounts of the fines should be 10% is not affected by Telenor's claims<sup>1320</sup> that: (i) there have been no or at most theoretical and minimal effects of the abusive conduct; (ii) the Authority applied a novel method when determining the level of aggregation for the downstream products in the margin squeeze analysis; (iii) based on the *Deutsche Telekom* case, the steady reduction of the margin squeeze was an argument for ranking the infringement as serious, instead of very serious; and (iv) the downstream market was characterised by fierce competition.

1080. The Authority has considered all relevant facts of the case when choosing 10% as the proportion of the value of sales to be used to establish the basic amounts of the fines. This proportion is considerably below the 30% upper limit referred to in paragraph 21 of the Guidelines on fines.

1081. More specifically, with regard to potential anti-competitive effects (see Section 10.5.2), the Authority recalls that the margin squeeze practices were of a nature where even the

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<sup>1316</sup> Judgment of 14 October 2010, *Deutsche Telekom*, C-280/08 P, EU:C:2010:603, paragraph 183; judgment of 17 February 2011, *TeliaSonera Sverige*, C-52/09, EU:C:2011:83, paragraph 31; judgment of 10 July 2014, *Telefónica*, C-295/12 P, EU:C:2014:2062, paragraph 75; see also judgment of 30 May 2018 in Case E-6/17 *FjarSKIPTI* [2018] EFTA Ct. Rep. 78, paragraph 58; judgment of 30 November 2000, *Industrie des poudres sphériques*, T-5/97, EU:T:2000:278; *Deutsche Telekom* Decision, paragraph 107; *Telefónica* Decision, paragraphs 281–284; and *Slovak Telekom* Decision, paragraph 823.

<sup>1317</sup> Judgment of 30 May 2018 in Case E-6/17 *FjarSKIPTI* [2018] EFTA Ct. Rep. 78.

<sup>1318</sup> See paragraph 179 above.

<sup>1319</sup> See Section 8.4.2 and Figure 2 above.

<sup>1320</sup> Reply to the SO, paragraphs 552–557.

*gross* margins for stand-alone residential MBB of an equally efficient competitor would have been negative for the entirety of each infringement period. Therefore, an equally efficient competitor would have been unable to compete with Telenor, even without taking into account any retail costs.

1082. With regard to the level of aggregation, as shown in Section 10.3.5.3 above, the Authority's approach is in line with EU precedents and case law and, as shown in Section 8.1.1 above, its definition of the relevant market is based on the standard rules of market definition to be found in the Notice on the definition of the relevant market.

1083. The *Deutsche Telekom* case has no direct relevance to the determination of the gravity percentage, because it related to the 1998 Guidelines on the method of setting fines ("1998 Guidelines on fines"), which were in force at that time, and which applied a different methodology to the one in the current Guidelines on fines. Under the 1998 Guidelines on fines, there were only three categories of infringement: minor, serious and very serious,<sup>1321</sup> while those categories do not exist under the current Guidelines on fines. Instead, under the current Guidelines on fines, the Authority can take up to 30% of the value of sales when assessing the gravity of the infringement.

1084. Finally, with regard to the alleged competition in the downstream market, it has been demonstrated in Section 9.3 above that Telenor had a high degree of market power in the relevant retail market with a market share of 46.4–52.5%. Competition from Telenor's wholesale customers was, due to the margin squeeze practices, negligible.

### 15.3.1.3 Duration

1085. The Authority considers that the duration of the three infringements is as follows:

- (1) the infringement period related to the wholesale tariffs charged to NwN started on 1 August 2008 and ended on 31 August 2010, which is 2.08 years;
- (2) the infringement period related to the wholesale tariffs charged to Ventelo started on 1 January 2008 and ended on 30 November 2010, which is 2.92 years;
- (3) the infringement period related to the wholesale tariffs charged to SPs started on 1 January 2008 and ended on 31 December 2012, which is 5 years.

1086. The Authority's conclusion regarding the duration of the three infringements is not affected by Telenor's claims<sup>1322</sup> that finding a dominant position in the relevant wholesale market is impossible for 2008 and the first half of 2009 due to Telenor's market shares in the merchant market and as of the entry into force of Nkom's 2010 SMP Decision. As demonstrated in Section 9.2 above, Telenor had a dominant position during the entire Period under Consideration.

<sup>1321</sup> 1998 Guidelines on the method of setting fines imposed pursuant to Article 15(2) of Regulation No 17 and Article 65(5) of the ECSC Treaty, OJ C 9, 14.1.1998, p. 3.

<sup>1322</sup> Reply to the SO, paragraphs 559–562.

#### 15.3.1.4 *Additional amount*

1087. The Authority concludes that the basic amounts should include an additional amount (entry fee) of 10% of the relevant values of sales in order to deter undertakings of a similar size and with similar resources from entering into the same type of infringement as Telenor. In reaching this conclusion, the Authority has taken into account the factors set out in the analysis related to the gravity of the infringement in Section 15.3.1.2 above.

#### 15.3.2 *Adjustments to the basic amounts*

##### 15.3.2.1 *Aggravating and mitigating circumstances*

1088. The Authority concludes that there are no aggravating or mitigating circumstances that should result in an increase or decrease in the basic amounts of the fines.

1089. As explained below, that conclusion is not affected by Telenor's claims<sup>1323</sup> that: (i) based on the European Commission's *Michelin* Decision,<sup>1324</sup> a significant adjustment should be made as the practice constituting an abuse was adjusted prior to the issuing of the SO; (ii) the conduct was unintentional;<sup>1325</sup> (iii) the method applied by the Authority is novel; (vi) the Norwegian NCA in its Decision A2011-48 dismissed a complaint submitted by TDC regarding an alleged margin squeeze in the "wholesale market for mobile communications" and Telenor was subject to regulation based on which Nkom never intervened in order to find a margin squeeze; and (v) any fine imposed must be of limited size on account of the unreasonable duration of the Authority's administrative procedure.<sup>1326</sup>

1090. First, the termination of the infringement may constitute a mitigating circumstance only if there are reasons to suppose that the undertaking concerned was encouraged to cease its anti-competitive conduct by the intervention of the Authority.<sup>1327</sup> There must be a causal link between the intervention of the Authority and the termination of the infringement concerned.<sup>1328</sup> It is not possible to establish such a causal link, nor does Telenor claim that one exists.

1091. Second, as to the claimed unintentional nature of the conduct, the Authority has concluded that Telenor committed the infringements intentionally, or at the very least negligently, because it could not have been unaware of the anti-competitive nature of its conduct. Further, according to established case law, negligent infringements are not, from the point of view of their effects on competition, less serious than those committed

<sup>1323</sup> Reply to the SO, paragraphs 564–566.

<sup>1324</sup> Commission Decision of 20 June 2001 in Case COMP/E-2/36.041/PO – *Michelin*, OJ L 143, 31.5.2002, p. 1.

<sup>1325</sup> See also Document No 1134573, Telenor's e-mail to the Authority of 25 May 2020.

<sup>1326</sup> Reply to the SSO, paragraph 315.

<sup>1327</sup> Judgment of 17 December 2015, *Orange Polska*, T-486/11, EU:T:2015:1002, paragraph 213.

<sup>1328</sup> *Ibidem*.

intentionally.<sup>1329</sup> Finally, even if the infringements were committed negligently in the present case, the Authority is not required to grant a reduction in the fine to Telenor. As the wording of paragraph 29 of the Guidelines on fines confirms, the Authority has a discretion in that regard, taking account of all of the circumstances of the case.<sup>1330</sup>

1092. Third, the Authority's method was not novel, as has been addressed in paragraph 1082 above.

1093. Fourth, sector-specific regulation or the involvement of the Norwegian NCA may be taken into account as a mitigating circumstance only where the anti-competitive conduct of the undertaking has been authorised or encouraged by public authorities.<sup>1331</sup> The Authority notes that Telenor was free to determine its applicable prices on the market. Any alleged inaction of the national authorities cannot be considered in the same way as a positive act, such as an authorisation or encouragement.<sup>1332</sup> Therefore, the rejection of complaints by Nkom or the Norwegian NCA cannot be considered as an authorisation or encouragement of Telenor's acts. In any event, those cases did not relate to the facts of the current case.

1094. Finally, with regard to the duration of the investigation, the Authority considers that there have been no delays or periods of inactivity in its investigation.<sup>1333</sup> Any rights of defence in relation to a potentially unduly lengthy investigation are safeguarded by the limitation periods in Article 25 of Chapter II of Protocol 4 to the Surveillance and Court Agreement. These provisions, which are mirrored in the EU legal order,<sup>1334</sup> create a complete system of rules covering the periods within which the Authority is entitled, without undermining the fundamental requirement of legal certainty, to impose fines on undertakings.<sup>1335</sup>

#### 15.3.2.2 *Specific increase for deterrence*

1095. The Authority concludes that the basic amounts of the fines imposed should be multiplied by 1.2.<sup>1336</sup>

1096. In reaching this conclusion, the Authority takes into account the need to ensure that fines have a sufficient deterrent effect and the fact that in 2019 Telenor had a turnover of

<sup>1329</sup> Judgment of 12 December 2012, *Electrabel*, T-332/09, EU:T:2012:672, paragraph 237. Consider also Order of 25 March 1996, *SPO*, C-137/95 P, EU:C:1996:130, paragraph 55.

<sup>1330</sup> See also judgment of 8 September 2016, *Lundbeck*, T-472/13, EU:T:2016:449, paragraph 841; judgment of 5 December 2013, *Caffaro*, C-447/11 P, EU:C:2013:797, paragraph 103.

<sup>1331</sup> Guidelines on fines, paragraph 29.

<sup>1332</sup> Judgment of 16 June 2011, *Ziegler*, T-199/08, EU:T:2011:285, paragraph 157.

<sup>1333</sup> See judgment of 18 April 2012 in Case E-15/10 *Posten Norge* [2012] EFTA Ct. Rep. 246, paragraph 276.

<sup>1334</sup> See the identical Article 25 of Council Regulation (EC) 1/2003 of 16 December 2002 on the implementation of the rules on competition laid down in Articles 81 and 82 of the Treaty, OJ L 1, 4.1.2003, p. 1.

<sup>1335</sup> See judgment of 19 March 2003, *CMA CGM*, T-213/00, EU:T:2003:76, paragraph 324.

<sup>1336</sup> See, for example, judgment of 12 July 2019, *Sony and Sony Electronics*, T-762/15, EU:T:2019:515, paragraphs 292–293, and judgment of 29 June 2006, *Showa Denko*, C-289/04 P, EU:C:2006:431, paragraphs 16, 23 and 36.

approximately EUR 11.54 billion (EUR 11 538 million), which is particularly large when compared with the revenues it generates from the provision of wholesale access and origination services on public mobile telephone networks in Norway and the provision of retail stand-alone MBB services to residential customers in Norway.

### *15.3.3 Final amount of the fines*

1097. The Authority concludes that the final amount of the fines to be imposed on Telenor Norge AS and Telenor ASA as jointly and severally liable should be:

- (1) EUR 32 562 000 for the infringement related to the wholesale NRO tariffs charged to NwN;
- (2) EUR 27 783 000 for the infringement related to the wholesale MVNO tariffs charged to Ventelo; and
- (3) EUR 51 606 000 for the infringement related to the wholesale tariffs charged to SPs.

1098. Telenor's turnover in the last business year preceding the adoption of this Decision, which ended on 31 December 2019, was EUR 11 538 million.<sup>1337</sup> As the total of the three amounts set above, EUR 111 951 000, is below the legal maximum of 10% of this turnover, no adjustment is necessary.

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<sup>1337</sup> See the 2019 Annual Report of the Telenor Group, available at: <<https://www.telenor.com/wp-content/uploads/2020/03/Print-Annual-Report-2019-Q-a1e12ba51bb18d30a0ea97bebc4f3e94-1.pdf>>, accessed June 2020. Calculated with a EUR/NOK exchange rate for 2019: 9.8511. Source: public annual exchange rate from the European Central Bank, available at:

<<https://ec.europa.eu/eurostat/databrowser/view/tec00033/default/table?lang=en>>, accessed June 2020.

HAS ADOPTED THIS DECISION:

#### Article 1

1. Telenor ASA and Telenor Norge AS have infringed Article 54 of the EEA Agreement by applying unfair tariffs which did not allow an equally efficient competitor, relying on wholesale access and origination services on Telenor's public mobile telephone network in Norway, to replicate the stand-alone MBB services offered by Telenor Norge AS to residential customers in Norway without incurring a loss.
2. The infringements covered the following periods and consisted of the following practices:
  - (a) From 1 August 2008 to 31 August 2010, charging wholesale NRO tariffs to NwN, on the basis of which an as-efficient competitor of Telenor would have earned negative gross margins;
  - (b) From 1 January 2008 to 30 November 2010, charging wholesale MVNO tariffs to Ventelo, on the basis of which an as-efficient competitor of Telenor would have earned negative gross margins;
  - (c) From 1 January 2008 to 31 December 2012, charging wholesale SP tariffs, on the basis of which an as-efficient competitor of Telenor would have earned negative gross margins.

#### Article 2

For the infringements referred to in Article 1, the following fines are imposed on Telenor ASA and Telenor Norge AS, jointly and severally:

- (a) for the infringement specified in Article 1.2(a), EUR 32 562 000;
- (b) for the infringement specified in Article 1.2(b), EUR 27 783 000;
- (c) for the infringement specified in Article 1.2(c), EUR 51 606 000.

The fines shall be paid in euro within three months of the date of notification of this Decision, into the following bank account:

IBAN No: BE55 3630 7508 8144 BIC: BBRUBEBB of the EFTA Surveillance Authority

With:

ING Bank  
1 Rue du Trône,  
B-1000 Brussels  
Belgium

After the expiry of that period, interest shall automatically be payable at the interest rate applied by the European Central Bank to its main refinancing operations on the first day of the month in which this Decision is adopted plus 3.5 percentage points.

#### Article 3

Telenor ASA and Telenor Norge AS shall immediately bring to an end the infringements referred to in Article 1 insofar as they have not already done so.

Telenor ASA and Telenor Norge AS shall refrain from repeating any act or conduct described in Article 1, and from any act or conduct having the same or equivalent object or effect.

#### Article 4

This Decision is addressed to:

Telenor ASA  
Snarøyveien 30  
1360 Fornebu  
Norway

And to

Telenor Norge AS  
Snarøyveien 30  
1360 Fornebu  
Norway

This Decision shall be enforceable pursuant to Article 110 of the EEA Agreement.

Done at Brussels, 29 June 2020.

For the EFTA Surveillance Authority,

Bente Angell-Hansen  
President

Frank J. Büchel  
Responsible College Member

Högni Kristjánsson  
College Member

Bente Angell-Hansen  
President

Carsten Zatschler  
Countersigning as Director,  
Legal and Executive Affairs

## GLOSSARY OF TERMS

**CDMA:** Stands for *Code-Division Multiple Access*. For a description of the CDMA 450 technology, see: <<http://www.cdg.org/technology/cdma450.asp>>, accessed June 2020.

**Churn or Churning:** This refers to a customer moving away from or abandoning a product.

**Focal product:** The product that is the focus of the investigation, i.e. in this case residential stand-alone MBB services.

**GSM:** Stands for *Global System for Mobile communication*, which is a digital mobile communications system.

**HSDPA:** Stands for *High Speed Downlink Packet Access* and is a technology upgrade for UMTS networks.

**LTE:** Stands for *Long Term Evolution* and is a 4G wireless broadband standard.

**MMS or Multimedia Messaging Service:** The service which allows mobile phone and smartphone users to send each other multimedia messages.

**Mobile broadband (“MBB”) services:** Services which allow end users to gain access to the internet via a large-screen device (for example, a laptop, netbook or tablet) without being confined to a fixed location (i.e. ‘*on the go*’ or ‘*on the move*’) through external dedicated modules (for example, PC-cards, USB modems or dongles with SIM technology) or via internal (built-in) modules (for example, PCs, laptops or tablets with embedded connectivity).

**Mobile communications services:** Services including both ordinary mobile communications services and stand-alone MBB services (see further definitions below).

**Mobile data services or mobile internet access:** Stand-alone MBB and MTDS.

**Mobile telephony data services (“MTDS”):** Services which allow end users to gain access to the internet, without being confined to a fixed location, via the same mobile telephony subscription/device as voice and SMS/MMS services.

**Mobile Virtual Network Operator (“MVNO”):** A mobile virtual network operator lacks a licence to utilise electromagnetic spectrum and a radio access network. Contrary to an NRO, an MVNO does not operate its own radio access network and does not hold its own spectrum. It has to buy all its access and origination services from an external supplier (i.e. an MNO or NRO). However, it has its own core network (The core of a mobile communications network can be distinguished from its radio access network. The core is the backbone part of the network and has different functionalities, such as routing of telephone calls, aggregation of traffic or authentication functionalities.) and all the technical systems necessary for interconnection and roaming with other network operators. An MVNO will have its own IMSI code (International Mobile Subscriber Identity Code), i.e. a unique number used in a mobile network to give each customer a unique identity, and to specify the SIM card’s home network and nationality, its

own mobile network code (MNC) and will offer its own subscriptions (SIM cards) and services to end users.

**NR Agreement:** A national roaming agreement with an MNO to use the MNO's network to provide services in geographic areas where the NRO concerned does not (yet) have coverage. Such an agreement enables a subscriber (end user) to use another operator's mobile network in areas where the subscriber's own operator does not have coverage.

**National Roaming Operator ("NRO"):** A national roaming operator controls its own frequency resources, since it has a licence to utilise electromagnetic spectrum and a radio access network. While it is in the process of rolling out its own nationwide physical network, an NRO lacks access in specific areas and therefore needs to buy access from MNOs to cover those areas. Such an operator therefore depends on a national roaming agreement with an MNO for those areas.

**NMT or Nordic Mobile Telephone system:** An analogue mobile telephone system (first generation or 1G), developed by the Telecommunication Administrations of Denmark, Finland, Norway and Sweden. Two variants exist: NMT-450 and NMT-900. The numbers indicate the frequency bands used.

**NRA:** national regulatory authority for electronic communications. In the present case, this includes the Norwegian Communications Authority, "Nkom" (Nasjonal kommunikasjonsmyndighet, including its predecessor the Norwegian Post and Telecommunications Authority ("NPT")).

**Ordinary mobile communications services:** Voice services, SMS/MMS and MTDS delivered collectively via the same mobile telephony subscription/device.

**Service Provider ("SP"):** An SP is a pure reseller. It lacks a licence to utilise electromagnetic spectrum and a radio network and does not have any own infrastructure. Contrary to NROs and MVNOs, it does not issue its own SIM cards. It has to rely on one or more wholesale access providers for all of its infrastructure and service delivery needs.

**SIM or Subscriber Identity/Identification Module:** An integrated circuit specially created for storing the international mobile subscriber identity (IMSI), used to identify and authenticate the holder of a mobile device.

**Significant market power ("SMP"):** In order to impose *ex ante* regulation in a relevant market in the electronic communications sector, a national regulatory authority (such as Nkom) must show *inter alia* that an operator has SMP (see Articles 14 to 16 of the Framework Directive, as defined in footnote 108 above). The term SMP is a synonym for dominance within the meaning of Article 54 EEA.

**SMS or Short Message Service:** The formal name for text messaging.

**Stand-alone mobile broadband ("MBB") services:** MBB subscriptions (tariff plans) which were available for purchase separately from other mobile communications services, i.e. not included in a package or bundle.

**UMTS:** Stands for Universal Mobile Telecommunications System, which refers to 3G mobile technology that can deliver higher capacity data/broadband services than under 2G mobile technology. 3G can be used for applications such as mobile voice telephony, SMS and mobile internet access services, as well as to connect to fixed wireless internet access (so-called Wi-Fi).

**USB:** Universal Serial Bus.

**ANNEX 1: MARGIN SQUEEZE RESULTS**

Table 14, Table 15 and Table 16 in this Annex show the margin squeeze results obtained by the Authority in relation to the wholesale tariffs charged to the NRO NwN, the MVNO Ventelo and to SPs, respectively. The source of these results is the spreadsheet model Document No 1068848, with input choices and sensitivities set to the values included in the following dashboard (see Section 10.4 of the Decision for detailed explanations).

Inputs		Parameter options	
A	Wholesale Network Access Fee	0	Zero allocation to Mobile Data
		1	ESA's allocation to Mobile Data by share of traffic costs
		2	Allocation in full to the product
B	Wholesale price adjustments for TDC	0	TDC wholesale prices not adjusted for retroactive compensation
		1	TDC wholesale prices adjusted for retroactive compensation
C	Wholesale discount selector	0	Actual wholesale discount % as given to MVNO/NR
		1	Maximum available wholesale discount %
		2	No wholesale discount %
D	Retail cost	0.02%	Calculated as % of retail revenue (ARPU)
E	Retail product scope - commercial availability	0	Retail numbers include all residential MBB products/customers
		1	Retail numbers exclude discontinued products/legacy customers
F	Connection, lock-in and termination fees	1	Zero allocation to residential market
			Fully allocated to residential market (raw data used by ESA) or allocated by seg 1
<b>a) Modelling sensitivities</b>			
G	Raw data	0	Raw data used by ESA
		1	Revised data from April 2016
H	Splits of three mixed plans into Business vs Residential	0	ESA's raw data and ESA's splits on three mixed plans
		1	[Note: requires sensitivity G = 0] Revised raw data and ESA's splits applied to three mixed plans + K&H new app 1
		2	[Note: requires sensitivity G = 1] Revised raw data and actual splits for all mixed plans
			[Note: requires sensitivity G = 1]
I	Upstream fixed fees that vary in increments with number of SIM	0	ESA's allocation assuming one subscriber per active SIM
		1	Alternative allocation reflecting that # subscribers > # active SIMs
J	SP upstream per SIM fees	0	ESA's approach based on Invoiced
		1	Alternative approach reflecting contractual prices for MBB SIMs
K	Annual margin calculation method	0	Simple average of monthly margins as estimated by ESA
		1	Weighted average of monthly margins based on subscribers
<b>b) Methodological sensitivities</b>			
L	Level of aggregation	0	Residential MBB only
		1	Residential + Business MBB
M1	International roaming revenues	0	Exclude international roaming revenues
		1	Include international roaming revenues
N1	International roaming costs	0	Exclude international roaming costs
		1	Include international roaming costs
M2	Handset and miscellaneous revenues	0	Exclude handset and miscellaneous revenues
		1	Include handset and miscellaneous revenues
N2	Handset and miscellaneous costs	0	Exclude handset and miscellaneous costs
		1	Include handset and miscellaneous costs
O	Choice of upstream data pricing model	0	ESA's approach based on invoices
		1	Alternative approach based on available pricing options
P	Upstream fixed fees that vary in increments with number of SIM	0	Allocation chosen in modelling sensitivities
		1	Excluding fees in months in which they were not incremental
Q	Network Norway's own network use	0	ESA's approach assuming 100% use of Telenor network
		1	Alternative approach reflecting Network Norway actual usage of Telenor network







**ANNEX 2: CALCULATION OF TELIA'S WHOLESALE CUSTOMERS' MARGINS****1 INTRODUCTION**

1. As noted in paragraph 373, the Authority's calculations<sup>1</sup> show that, during the Period under Consideration, Telia's wholesale customers (would have) earned negative margins in the supply of stand-alone MBB services to residential customers. This, in turn, limited their incentive to enter that market or expand their production in that market throughout the Period under Consideration.
2. This Annex explains the approach used by the Authority to calculate Telia's wholesale customers' margins and considers Telenor's observations regarding those calculations.

**2 THE AUTHORITY'S APPROACH TO CALCULATING TELIA'S WHOLESALE CUSTOMERS' MARGINS**

3. In order to calculate Telia's wholesale customers' margins, the Authority has used the same approach and methodology as the one used in the margin squeeze calculations relating to Telenor's wholesale customers (see Section 10.4 of the Decision). In particular, the main elements of this methodology are the following:
  - (a) The level of efficiency of (potential) competitors is assessed on the basis of the 'equally efficient competitor' or "EEC" test;
  - (b) The appropriate cost standard applied in the analysis is Telia's long-run average incremental costs ("LRAIC");
  - (c) The profitability analysis is carried out on the basis of a period-by-period methodology; and
  - (d) The level of product/customer aggregation used is the aggregated portfolio of all retail products/services sold by Telia in the relevant downstream market (namely: stand-alone MBB services supplied to residential customers in Norway).
4. The main elements of the Authority's calculations are summarised in the next sections. The Authority's calculations are based on data provided by Telia, which include a total of 17 wholesale customers (all of whom were SPs, except Tele2, which had an MVNO agreement).<sup>2</sup>

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<sup>1</sup> The Authority's calculations were presented in Document No 1076031 as an Annex to the SSO (including an Appendix). The accompanying spreadsheet model prepared by the Authority was included as Document No 1074655 (confidential version) and Document No 1074657 (non-confidential version). In the LoF, the Authority also provided a slightly revised version of the spreadsheet model originally annexed to the SSO, which included several sensitivity/robustness checks of the calculations presented in the SSO (see Document No 1116378 for the confidential version and Document No 1116433 for the non-confidential version).

<sup>2</sup> See the request for information sent by the Authority to Telia on 13 February 2017 (Documents No 840673 and 1076450) and Telia's reply of 14 March 2017. For the non-confidential version of Telia's reply, see: Cover letter (Document No 847236), Appendix 1: Telia's reply to the Authority's questionnaire (Document No 847237), non-confidential version of Appendix 2: Excel spreadsheet on Retail & Wholesale (Document No 1076156), non-

5. The Authority notes that applying the EEC test to calculate the margins of Telia's wholesale customers is a conservative approach (to the advantage of Telenor). This is because these calculations, unlike those concerning the margins of Telenor's wholesale customers, are not done to test whether a margin squeeze abuse has taken place. They are carried out in order to determine the effectiveness and immediacy of supply-side substitution when defining the relevant retail market. The purpose is therefore to assess whether, based on the wholesale prices charged by Telia, Telia's wholesale customers would have had an economic incentive to enter the residential stand-alone MBB market or to expand their presence, in light of the prevailing retail prices. Assuming that those wholesale customers, as new (and likely smaller) entrants, would have the same retail customer portfolio and retail volumes and revenues as Telia is a rather unrealistic scenario and therefore the approach set out in this Annex is conservative.

## 2.1 Calculation of gross margins before taking into account downstream costs

6. In the same way as for the margin squeeze calculations relating to Telenor,<sup>3</sup> in line with the EEC approach, the Authority has considered, at the downstream level, Telia's own incremental revenues<sup>4</sup> and Telia's customer usage patterns (i.e. Telia's end users' consumption of residential stand-alone MBB). At the upstream level, the Authority has considered prices charged by Telia to its wholesale customers for wholesale access to its mobile network.<sup>5</sup>
7. The difference between Telia's downstream revenues and the wholesale prices that it charged to its wholesale customers (which were also its downstream competitors) for wholesale access to its mobile network represents a "gross" margin, i.e. it does not take into account Telia's relevant downstream costs. In line with the EEC approach, such margin is not the actual gross margin earned by Telia's wholesale customers, but rather the gross margin that Telia would have earned if it were to pay its own wholesale terms.

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confidential version of Appendix 2: Excel spreadsheet on Retail & Wholesale – corrected version of 12 June 2019, in which an error in the data for January 2012 has been corrected by Telia (Document No 1076158), Appendix 3 (Document No 847239), Appendix 4 (Document No 847240), Appendix 5 (Document No 847241), Appendix 6 (Document No 847242) and Appendix 7: wholesale contracts, excluding the still active wholesale contracts, i.e. those with Wireless Maingate, Lycamobile NUF and Telio AS/NextGenTel (Documents No 847808, 847809, 847810, 847811, 847812, 847813, 847814, 847815, 847817, 847818, 847819, 847820, 847821, 847822, 847823, 847824 and 847825). For the confidential information included in Telia's reply of 14 March 2017, see: confidential version of Appendix 2: Excel spreadsheet on Retail & Wholesale (Document No 847238), confidential version of Appendix 2: Excel spreadsheet on Retail & Wholesale – corrected version of 12 June 2019, in which an error in the data for January 2012 has been corrected by Telia (Document No 1076141 and the cover e-mail: Document No 1076142) and the confidential still active wholesale contracts with Wireless Maingate, Lycamobile NUF and Telio AS/NextGenTel (Documents No 847806, 847816, 847807 and 847826).

<sup>3</sup> See Section 10.4 of the Decision.

<sup>4</sup> For its calculations, the Authority has used the downstream (retail) revenues for residential stand-alone MBB services as reported by Telia, which include both fixed and variable fees: see Telia's reply to the Authority's request for information of 13 February 2017, Appendix 2 (see footnote 2).

<sup>5</sup> For the calculation of Telia's wholesale prices, the Authority has used the amounts invoiced by Telia for mobile data to each of its 17 wholesale customers in each month: see Telia's reply to the Authority's request for information of 13 February 2017, Appendix 2 (see footnote 2). Some of Telia's customers bought access from Telia only in some months during the Period under Consideration.

8. Applying this approach, the Authority has found that Telia's wholesale customers' gross margins were negative during the entire Period under Consideration.<sup>6</sup>

## 2.2 Telia's downstream costs

9. Since the gross margins available to Telia's wholesale customers were negative, the Authority has not examined Telia's downstream costs in the present case. Taking such costs into account would only make the margins more negative.

## 3 TELENOR'S OBSERVATIONS REGARDING THE AUTHORITY'S CALCULATIONS OF TELIA'S WHOLESALE CUSTOMERS' MARGINS

10. In its Reply to the SSO, Telenor submitted a number of observations regarding the Authority's calculations of Telia's wholesale customers' margins.<sup>7</sup>
11. In the LoF, the Authority commented on certain of Telenor's observations. The Authority also provided a slightly revised version of the spreadsheet model originally annexed to the SSO, which included several sensitivity/robustness checks of the calculations presented in the SSO.<sup>8</sup>
12. Telenor reiterated some of the observations which it had made in its Reply to the SSO in its Reply to the LoF.<sup>9</sup>
13. In the following sections, the Authority considers each of Telenor's observations on the Authority's calculations of Telia's wholesale customers' margins, as submitted in Telenor's Reply to the SSO and to the LoF.

### 3.1 Alleged incorrect level of aggregation

14. Telenor submits that the level of aggregation that the Authority uses in its modelling is incorrect, because it only tests margins across Telia's residential stand-alone MBB tariff plans. Instead, in Telenor's view, the Authority should also include mobile telephony – voice and data – plans, as well as business stand-alone MBB plans.<sup>10</sup>
15. As discussed in Section 10.3.5 of the Decision, the Authority takes the view that the appropriate level of aggregation in this case is limited to residential stand-alone MBB

<sup>6</sup> See Document No 1074655 for the confidential version and Document No 1074657 for the non-confidential version ("Margin Calculations" tab).

<sup>7</sup> See, in particular, Section 7 of Annex 1 to the Reply to the SSO – CRA Comments.

<sup>8</sup> See Document No 1116378 for the confidential version and Document No 1116433 for the non-confidential version.

<sup>9</sup> See, in particular, Sections 3.2.3.2 and 3.2.3.3 of the Reply to the LoF as well as the spreadsheet included as Appendix 2 (Document No 1123015).

<sup>10</sup> See Section 7.1 of Annex 1 to the Reply to the SSO – CRA Comments. In Section 3.2.3.2 of its Reply to the LoF, Telenor reiterates its view that the relevant level of aggregation for margin squeeze testing is broader than residential stand-alone MBB.

tariff plans. Telenor's objection must therefore be rejected for the same reasons as discussed in Section 10.3.5 of the Decision.

### 3.2 Alleged inclusion of irrelevant wholesale customers

16. Telenor submits that the Authority includes in its margin calculations irrelevant wholesale customers, notably wholesale customers of Telia that were not active in the supply of residential stand-alone MBB or that had no plans to enter that market during the Period under Consideration.<sup>11</sup> On this basis, according to Telenor, only five out of Telia's 17 wholesale customers should be considered as relevant for inclusion in the margin calculations.<sup>12</sup>
17. The Authority disagrees with Telenor in this respect.
18. In particular, for the same reasons as given in Section 10.5.2.5.4 of the Decision, the Authority considers that the 12 wholesale customers of Telia that were not supplying residential stand-alone MBB during the Period under Consideration should be considered as potential competitors. In the Authority's view, those wholesale customers were active in a neighbouring market, had the ability to enter the residential MBB market and entry would have been economically viable, absent the negative gross margins that they would have earned during the Period under Consideration.<sup>13</sup>

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<sup>11</sup> See Section 7.2 of Annex 1 to the Reply to the SSO – CRA Comments. According to Telenor, for example, Lycamobile should not be included, because it focused on supplying pre-paid mobile communications services to immigrants and visitors to Norway. In Telenor's view, Lycamobile was, therefore, unlikely to have had any interest in entering into MBB. See paragraph 162 of Annex 1 to the Reply to the SSO.

<sup>12</sup> In Section 3.2.3.2 of its Reply to the LoF, Telenor reiterates that the Authority should exclude those wholesale customers of Telia that were not interested in using Telia's network to supply residential stand-alone MBB retail services and that did not negotiate any special wholesale pricing from Telia for that purpose. The five wholesale customers of Telia who, according to Telenor, are relevant for the Authority's analysis are: Tele2, Trigcom, Hello, Altibox and one of the customers with a confidential agreement (customer A).

<sup>13</sup> See the results presented in the spreadsheet annexed by the Authority to the SSO, i.e. Document No 1074655 (confidential version) and Document No 1074657 (non-confidential version), "Margin Calculations" tab.

By way of a sensitivity/robustness check, which is described in more detail in Section 3.3 of this Annex, the Authority also notes that, even if each of the 12 wholesale customers of Telia in question had paid a fixed wholesale tariff of NOK [CONFIDENTIAL] per active SIM card from August 2009 onwards (as Telenor submits was the case for Hello and Trigcom, see Section 3.3 of this Annex for details, in particular paragraph 39 and corresponding footnotes) – rather than a variable wholesale data tariff – their gross margins would have become only slightly positive and would have, in all likelihood, been insufficient to cover downstream costs. The same would be true if each of the 12 wholesale customers of Telia in question had paid a fixed wholesale tariff of NOK [CONFIDENTIAL] per active SIM card from September 2011 onwards (as Telenor submits was the case for Altibox, see Section 3.3 of this Annex for details, in particular paragraph 39 and corresponding footnotes), rather than a variable wholesale data tariff. The Authority notes that this sensitivity/robustness check uses the most favourable assumptions for Telenor (as explained in more detail in Section 3.3) and is entirely fictional, since the wholesale customers of Telia in question might not have received the same favourable terms that, according to Telenor, Telia offered to Hello, Trigcom and Altibox. This shows that none of Telia's wholesale customers in question – i.e. those that the Authority considers to be potential competitors in the residential stand-alone MBB market – had economic incentives to enter during the Period under Consideration.

19. Accordingly, the Authority rejects Telenor's objection that it included irrelevant wholesale customers in its calculations.
20. In any event, the Authority notes that, if it were to include in its calculations only the five wholesale customers of Telia that Telenor considers to be relevant, those five customers had negative gross margins and, therefore, would still have had no incentives to supply stand-alone MBB using Telia's network.<sup>14</sup>
21. Telenor also submits that Ventelo should be excluded from the Authority's calculations, because, according to its calculations, between 2010 and 2012, Ventelo reported positive gross margins in relation to residential stand-alone MBB from its wholesale agreement with Telenor. According to Telenor, this means that the margins available to Ventelo under its wholesale agreement with Telia are not relevant for assessing whether Ventelo could profitably supply residential stand-alone MBB in those years.<sup>15</sup>
22. The Authority, however, disagrees with Telenor in this respect.
23. As explained in Section 10.4.5 of the Decision, the Authority recalls that Ventelo's wholesale agreement with Telenor led to negative gross margins for residential stand-alone MBB services from January 2008 to November 2010 (both included), from January 2012 to March 2012 (both included), in October 2012 and in December 2012; in the remaining months, Ventelo's gross margins were slightly positive.<sup>16</sup>
24. On the other hand, Ventelo's wholesale agreement with Telia resulted in negative gross margins throughout the Period under Consideration (even after the various sensitivity/robustness checks described by the Authority in the following sections).
25. In the Authority's view, the fact that Ventelo chose to maintain its wholesale agreement with Telia – even though such agreement gave rise to negative gross margins (as opposed to its wholesale agreement with Telenor in several months after November 2010)<sup>17</sup> – means that Ventelo's wholesale agreement with Telia had some commercial and strategic value for Ventelo and is therefore relevant to assessing Ventelo's incentives to supply MBB. Otherwise, the rational decision for Ventelo to take would have been to terminate its wholesale agreement with Telia, which it did not.

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<sup>14</sup> See Section 3.3 as well as Sections 3.4 to 3.6 of this Annex.

<sup>15</sup> See paragraph 165 of Annex 1 to the Reply to the SSO – CRA Comments. For the years 2008 and 2009, Telenor submits that it is not clear whether Ventelo had any interest in supplying residential stand-alone MBB in those years (since, according to Telenor, Ventelo only started supplying residential stand-alone MBB in 2011).

<sup>16</sup> As noted in Section 10.4 of the Decision, the Authority has calculated *gross* margins for its analysis, which exclude downstream costs. A (slightly) positive gross margin, therefore, does not mean that Telenor's wholesale customers could provide stand-alone MBB services to residential customers in an economically viable way.

<sup>17</sup> The Authority also notes that, even in the presence of (slightly) positive gross margins, Ventelo would still likely have had limited incentives during the second part of the Period under Consideration to supply residential stand-alone MBB services using Telenor's network, since those (slightly) positive gross margins would likely have been insufficient to cover downstream costs. See paragraph 961 and Section 10.4.4 of the Decision, Annex I, Table 14 of the Decision and footnote 26 below.

26. On this basis, the Authority concludes that the margins that Ventelo earned from its wholesale agreement with Telia are informative of its incentives to supply residential stand-alone MBB during the entire Period under Consideration.
27. Lastly, Telenor submits that the wholesale agreements between Telia and two subsidiaries of NwN – i.e. the agreements in the name of Mobil Fabrikken (One Call) and Automobil Invest AS (Network Norway)<sup>18</sup> – should also be excluded from the Authority’s calculations. According to Telenor, these two subsidiaries of NwN had a separate wholesale agreement with ICE in 2008 and would have thus been able to use that agreement to supply MBB in that year. As a result, according to Telenor, the wholesale agreements between Telia and the two subsidiaries of NwN in question in 2008 are not informative about whether they had economic incentives to enter and expand in residential stand-alone MBB in that year.
28. The Authority disagrees with Telenor also on this point.
29. In the Authority’s view, Telenor overstates the importance of the wholesale agreements that NwN’s subsidiaries had with ICE in 2008 (considering also that ICE lacked nationwide coverage, as explained in Section 9.2.2.2). In particular, in the Authority’s view, the fact that (i) NwN’s subsidiaries also had agreements with Telia although these entailed negative gross margins and that (ii) NwN itself switched away from Telia and signed an NRO agreement with Telenor – an agreement which the Authority has found to also entail negative gross margins and thus constitute a margin squeeze<sup>19</sup> – indicates the limited importance of the wholesale agreements with ICE. Otherwise, the rational decision for NwN would have been to switch to ICE (and for its subsidiaries to continue using ICE).<sup>20</sup> Therefore, the Authority finds that the wholesale agreements between Telia and the two subsidiaries of NwN in question are informative of their incentives to supply MBB during the entire Period under Consideration.
30. Moreover, the two subsidiaries of NwN in question feature in the Authority’s calculations only for a limited period of time, notably six months (from January to June 2008) in the case of Mobil Fabrikken (One Call) and 15 months (from January 2008 to March 2009) in the case of Automobil Invest (Network Norway). Accordingly, the Authority considers that, even if these two wholesale customers were removed from the calculations, this would not invalidate the Authority’s overall conclusion about lack of economic incentives for Telia’s wholesale customers to supply MBB, which is based on the entire portfolio of Telia’s wholesale customers throughout the Period under Consideration.

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<sup>18</sup> See paragraph 165 of Annex 1 to the Reply to the SSO – CRA Comments. The two wholesale agreements to which Telenor refers are Document No 847817 and Document No 847814, in the case of Mobil Fabrikken (One Call) and Automobil Invest AS (Network Norway), respectively; see footnote 125 of Annex 1 to the Reply to the SSO – CRA Comments.

<sup>19</sup> As explained in Section 10.4 of the Decision.

<sup>20</sup> The fact that NwN relied first on Telia and then on Telenor as its main suppliers of wholesale access is also consistent with the finding that ICE exerted a limited competitive constraint during the Period under Consideration, as explained in Section 9.2.2.2 of the Decision.

31. In light of the foregoing, the Authority rejects Telenor's objection that the Authority included irrelevant wholesale customers in its calculations.

### 3.3 Overstatement of wholesale data costs for stand-alone MBB plans

32. As noted in the previous section, Telenor submits that the Authority should include in its calculations only five of Telia's wholesale customers (i.e. Tele2, Trigcom, Hello, Altibox and one of the customers with a confidential agreement, i.e. customer A). This is because, according to Telenor, only those five wholesale customers would have been interested in using Telia's network to supply residential stand-alone MBB services and would have negotiated with Telia wholesale data prices specifically tailored for supplying those services.
33. In relation to those five wholesale customers, Telenor also submits that the Authority overstates their wholesale data costs for stand-alone MBB plans and thus understates their gross margins.<sup>21</sup>
34. According to Telenor, this is because, in order to calculate wholesale data costs, the Authority calculates – for each of those five wholesale customers – an average wholesale price per MB (“AWPPMB”) which results from dividing the total invoiced amount for data by the total data traffic volume, across *all mobile plans* of the wholesale customer concerned. Telenor argues that, in doing so, the Authority blends together: (i) wholesale prices for data used in residential stand-alone MBB plans; and (ii) wholesale prices for data used in mobile telephony plans (i.e. MTDS). In Telenor's view, it is inappropriate to use such an average to assess gross margins in relation to residential stand-alone MBB plans, because retail prices for residential stand-alone MBB plans should only be compared to wholesale data prices specifically tailored for those plans.
35. In this respect, Telenor adds that Telia had – since early 2008 – offered wholesale data prices specifically tailored for the supply of residential stand-alone MBB plans, which resulted in lower wholesale prices per MB than the average wholesale price per MB (AWPPMB) calculated by the Authority.<sup>22</sup>
36. The Authority disagrees that it has used the incorrect wholesale data prices.
37. First, as explained in Section 10.4.2.3.5 of the Decision, the Authority considers that the correct approach to modelling upstream charges in this case is on the basis of the pricing options that these wholesale customers *actually* chose (and, therefore, to make use of invoiced amounts). In the Authority's view, it would be inappropriate for it to second-

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<sup>21</sup> See Section 7.3 of Annex 1 to the Reply to the SSO – CRA Comments and Section 3.2.3.2 of the Reply to the LoF.

<sup>22</sup> In Section 3.2.3.2 of its Reply to the LoF, Telenor refers to Telia's wholesale agreements with Hello and Trigcom, which included, from August 2009, the option for these two customers to pay a fixed wholesale price of NOK [CONFIDENTIAL] per month (Telenor notes that it was, presumably, a fixed price per SIM or per subscriber, but that this was not clearly stated in the contracts), with no variable prices per MB. Telenor also refers to Telia's wholesale agreement with Altibox. According to Telenor, upon becoming a wholesale customer of Telia in September 2011, Altibox had the option of a fixed wholesale price of NOK [CONFIDENTIAL] per SIM card per month. Finally, Telenor submits that Tele2's wholesale agreement with Telia included, from March 2010 onwards, low per-MB prices for monthly volume use above [CONFIDENTIAL] MB.

guess *ex post* the decisions made at the time by well-informed and rational market players such as Telia's wholesale customers (i.e. whether they chose the dedicated MBB tariff offered by Telia, if any, and, if so, why).

38. Second, the relevance of the "contamination" issue – which, according to Telenor, results from the Authority mixing wholesale data prices tailored for residential stand-alone MBB plans together with (presumably higher) wholesale data prices for use in mobile telephony plans (i.e. MTDS) – depends on the relative proportion of data volumes used in MBB plans and mobile telephony plans. The Authority considers that the relevance of this issue is small, because, during the Period under Consideration, data volumes used in MBB plans significantly exceeded data volumes used in mobile telephony plans. This is especially true in the early years of the Period under Consideration, when very few retail customers made use of data allowances included in mobile telephony plans (as noted in Section 8.4.4.2 of the Decision).
39. Third, even if the Authority were to accept the assumptions included in Telenor's Reply to the LoF and the corresponding results in their entirety,<sup>23</sup> those results would still show that Telia's wholesale customers reported only small positive gross margins in the relevant months.<sup>24</sup> The Authority recalls that, in this case, it has calculated *gross* margins

<sup>23</sup> See the spreadsheet annexed as Appendix 2 to the Reply to the LoF, in particular tabs "Margin calcs-Telenor ARPU&FP" and "Margin calcs-Telenor ARPU&FP2" (Document No 1123015), where Telenor provides its calculations for Hello, Trigcom, Altibox and Tele2. See also Section 3.2.3.2 of the Reply to the LoF.

Using Telenor's approach results in improved gross margins for Telia's wholesale customers. In particular, in the case of Hello and Trigcom, Telenor submits that the negative gross margins presented by the Authority in the SSO would be reduced "*significantly*", if the fixed price of NOK [CONFIDENTIAL] were to be modelled as a fixed price per subscriber. According to Telenor, such gross margins would "*improve even more*" and be positive in all months from August 2009 onwards, if the fixed price of NOK [CONFIDENTIAL] were to be modelled as a fixed price per active SIM (and assuming that Hello and Trigcom had the same proportion of active SIMs to subscribers as Telenor).

In the case of Altibox, Telenor submits that Altibox's gross margins would be "*close to zero (bouncing a little above and below from month to month)*" if the fixed price of NOK [CONFIDENTIAL] were to be modelled as a fixed price per SIM, including inactive SIMs. It submits that such gross margins would be "*firmly positive*" if the fixed price of NOK [CONFIDENTIAL] were to be modelled as a fixed price per *active SIM only* (and assuming again the same proportion of active SIMs to subscribers as Telenor).

Lastly, in the case of Tele2, Telenor submits that Tele2's gross margins would become positive from March 2012 onwards (whereas the margins calculated by the Authority and presented in the SSO would be negative during those months).

All the results obtained by Telenor assume the use of Telenor's downstream revenues (ARPU) and Telenor's AMBPU and also include volume discounts of [0-20]% (which are assumptions favourable to Telenor); see, in this respect, Sections 3.5 and 3.6 of the present Annex.

<sup>24</sup> See the spreadsheet annexed as Appendix 2 to the Reply to the LoF, in particular tabs "Margin calcs-Telenor ARPU&FP" and "Margin calcs-Telenor ARPU&FP2" (Document No 1123015).

See also Document No 1128980, in particular tabs "Summary changes post-LOF (1a)", "Summary changes post-LOF (1b)" and "Summary changes post-LOF (2)", where the results obtained by Telenor in Appendix 2 to its Reply to the LoF are compared with those presented by the Authority in the LoF (see Document No 1116378 for the confidential version and Document No 1116433 for the non-confidential version).

Specifically, if the fixed price were to be modelled as a fixed price per active SIM (which is the assumption most favourable to Telenor), the average *positive* gross margin for Hello and Trigcom would be equal to NOK 35 and NOK 39, respectively (whereas the average *negative* gross margins would equal to minus NOK 1 732 and minus NOK 4 246, respectively). Under the same assumptions, Altibox would report a positive gross margin

without taking into account downstream costs at all.<sup>25</sup> Were those costs to be included even partially, the small positive margins calculated by Telenor using the most favourable assumptions would likely turn negative.<sup>26</sup> This would, in turn, indicate that these specific wholesale customers of Telia did not have incentives to supply stand-alone MBB using Telia's network.

40. In light of the foregoing, the Authority considers that Telenor's objection in this respect does not alter its conclusion in respect of these five wholesale customers of Telia.

### 3.4 Failure to include all incremental retail revenues

41. Telenor further argues that the Authority appears to have excluded from its modelling Telia's roaming, device and miscellaneous revenues, as well as connection, lock-in and termination fees.<sup>27</sup> According to Telenor, failure to take into account these additional revenue streams – or, at least, the margin contributions of these additional services after taking into account the corresponding incremental costs – results in an underestimation of Telia's incremental downstream revenues.
42. As explained in Section 10.4.2.2 of the Decision, the Authority has decided, on a conservative basis and to Telenor's advantage, to include all of Telenor's incremental downstream revenues – except international roaming revenues – in the calculation of Telenor's margins.
43. For consistency, and again on a conservative basis, the Authority considers that it would be appropriate to test – as a sensitivity/robustness check – the impact of doing the same when calculating Telia's wholesale customers' margins.

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equal, on average, to NOK 60 in all the 16 months it bought access from Telia (i.e. from September 2011 to December 2012).

If, instead, the fixed price were to be modelled as a fixed price per subscriber (which is an assumption less favourable to Telenor) rather than per active SIM, the gross margins available to Hello and Trigcom would always be *negative*. Under the same assumption, Altibox would report an average *positive* gross margin of NOK 4 (whereas its average *negative* gross margins would be equal to minus NOK 5).

Lastly, Tele2 would report an average *positive* gross margin equal to NOK 27 in the period between March 2012 and December 2012 (whereas its average *negative* gross margins would be equal to minus NOK 1 239).

As noted in the previous footnote, all these results assume the use of Telenor's downstream revenues (ARPU) and Telenor's AMBPU and also include volume discounts of [0-20]% (which are assumptions favourable to Telenor); see, in this respect, Sections 3.5 and 3.6 of the present Annex.

<sup>25</sup> See Section 10.4.4 of the Decision.

<sup>26</sup> In Section 10.4.4 of the Decision, the Authority refers to a report by Analysys Mason, which considered a variety of incremental retail cost categories. Specifically, the costs considered by Analysys Mason were: subscriber acquisition costs (estimated to be equal to NOK 540 per subscriber per year for MBB); personnel costs (estimated at NOK 115 per subscriber per year for MBB); marketing costs (estimated at NOK 32 per subscriber per year for MBB, plus a fixed component of NOK 50 million per year); billing and collection costs (estimated at NOK 12 per subscriber per year for MBB, plus a fixed component of NOK 30 million per year); general and administration costs (estimated at 0.6% of retail revenues per year); customer care costs (estimated at 1.15% of retail revenues per year); and, bad debt (estimated at NOK 50 per subscriber per year).

<sup>27</sup> See Section 7.6 of Annex 1 to the Reply to the SSO – CRA Comments.

44. The Authority, however, does not have information on Telia's incremental downstream revenues during the Period under Consideration. To remedy this lack of information, the Authority has used the following proxy in this sensitivity/robustness check.<sup>28</sup> It has calculated the increase in Telenor's downstream revenues which results from including all of Telenor's incremental downstream revenues (with the exception of international roaming revenues) during the Period under Consideration and applied the same 'uplift' to Telia's downstream revenues used in the SSO.<sup>29</sup>
45. Increasing Telia's downstream revenues by the same percentage as in Telenor's case results in Telia's wholesale customers' gross margins changing sign (i.e. turning from negative to positive), compared to the results presented in the SSO, in only two of a total of 493 cases (i.e. customer-month pairs). Overall, in this robustness check, Telia's wholesale customers' margins are negative in 485 cases (down from 487 in the calculations annexed to the SSO), out of a total of 493 cases.<sup>30</sup>
46. In the Authority's view, the fact that, in this sensitivity/robustness check, Telia's wholesale customers' margins change sign from negative to positive in only two of the 493 possible cases after "uplifting" Telia's downstream revenues confirms the robustness

<sup>28</sup> As explained in the next section (Section 3.5), the Authority has also – as an alternative sensitivity/robustness check – calculated Telia's wholesale customers' margins using Telenor's retail prices (ARPU) and Telenor's retail customers' data usage (AMBPU).

<sup>29</sup> In particular, the Authority has considered two alternative methodologies to calculate the uplift.

With the first methodology, the uplift is simply the increase resulting from comparing, for the entire Period under Consideration, the average of Telenor's monthly ARPU including incremental downstream revenues (as done in the SSO, see Document No 1068848) with the average of Telenor's monthly ARPU *not* including incremental downstream revenues (as done in the SO, see Document No 770397). This single number – "Uplift 1" – amounted to 15.7%, which is the increase uniformly applied to Telia's downstream revenues in all months.

With the second methodology, instead, the Authority has increased Telia's downstream revenues in each given month by the corresponding uplift in Telenor's downstream revenues in that specific month. This monthly uplift – "Uplift 2" – varies, during the Period under Consideration, between a minimum of 2.5% and a maximum of 25.3% and is equal, on average, to 15.6%.

For details of these calculations, see Document No 1116378 for the confidential version of the spreadsheet model and Document No 1116433 for the non-confidential version, and, in particular, the tab "Comparison Telia w uplifts", in conjunction with the tabs "Margin Calcs-Telia SSO", "Margin Calcs-Telia w uplift 1", "Margin Calcs-Telia w uplift 2", "Wholesale Calcs - Telia" and "Retail Calcs - Telia & Telenor".

<sup>30</sup> The total number of cases in the Authority's calculations is 493 (and not the theoretical  $17 \times 60 = 1\,020$  cases), because not all 17 of Telia's wholesale customers were active in each one of the 60 months of the Period under Consideration.

The Authority's comparison is carried out in the tab "Comparison Telia w uplifts" of Document No 1116378 (confidential version) and Document No 1116433 (non-confidential version). See also the previous footnote for details of the Authority's calculations.

It should be noted that the results reported in the text above are from Document No 1116378 (confidential version) and may differ, in some cases, from those in Document No 1116433 (non-confidential version), because the latter does not include three of Telia's wholesale customers (as information about them was deemed to be confidential). The Authority made Document No 1116378 (confidential version) accessible to Telenor's external legal and economic advisors through a data room procedure.

and validity of the results presented in the SSO,<sup>31</sup> which are maintained in the present Decision.

### 3.5 Failure to include the appropriate retail plans

47. Telenor argues that the Authority considers the wrong retail plans when modelling Telia's wholesale customers' margins.<sup>32</sup> In particular, according to Telenor, the Authority should assess whether Telia's wholesale customers – when supplying residential stand-alone MBB services – were not able to earn a profit by matching *Telenor's* retail prices (which were higher than Telia's retail prices).<sup>33</sup>
48. On this basis, Telenor submits that the Authority's findings in relation to market definition (notably, on the lack of supply-side substitution) are incorrect. For the same reason, according to Telenor, the Authority's finding that Telia's wholesale customers could not compete vigorously on the downstream market due to unfavourable terms provided by Telia is incorrect.
49. In order to test the impact of using Telenor's approach, as a sensitivity/robustness check of the calculations presented in the SSO and on a conservative basis to the advantage of Telenor, the Authority has examined whether Telia's wholesale customers – when supplying residential stand-alone MBB services – were able to earn a profit if they matched Telenor's retail prices (as measured by the ARPU – Average Revenue Per User) and replicated Telenor's retail customers' data usage (as measured by the AMBPU – Average Megabyte Per User).<sup>34</sup>
50. For this purpose, in order to be consistent with Telenor's margin squeeze test (see, in particular, Section 10.4.2.2 of the Decision), the Authority has used the revised data on Telenor's revenues provided by Telenor in its Reply to the SO, including notably: i) device and miscellaneous revenues (and the corresponding costs) that can be considered as incremental to the supply of stand-alone residential MBB; and ii) connection, lock-in and termination fees. On the other hand, for the reasons set out in Section 10.4.2.2 of the

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<sup>31</sup> See footnote 13 of this Annex.

<sup>32</sup> See Section 7.7 of Annex 1 to the Reply to the SSO – CRA Comments.

<sup>33</sup> See paragraph 174 of Annex 1 to the Reply to the SSO – CRA Comments.

<sup>34</sup> This sensitivity/robustness check is conservative, since it is reasonable to assume that a new entrant may have chosen to compete matching Telia's retail prices rather than Telenor's (higher) retail prices. The fact that new entrants might have to undercut the incumbent's prices in order to compete and attract new customers has been recognised by the jurisprudence. See, in particular, judgment of 10 April 2008, *Deutsche Telekom*, T-271/03, EU:T:2008:101, paragraph 202: "*In any event, since the applicant significantly lowered its telephone call charges in the period covered by the contested decision [...], it is conceivable that competitors did not even have the economic opportunity to offset charges suggested by the applicant. In fact, the competitors, already at a competitive disadvantage by comparison with the applicant in relation to local network access, had to apply even lower call charges than the applicant in order to encourage potential customers to discontinue their subscription to the applicant and to subscribe to them instead.*"

Decision, the Authority has excluded from Telenor's revenues international roaming revenues (and the corresponding costs).<sup>35</sup>

51. The results of this sensitivity/robustness check show that, although Telenor's downstream revenues are higher than Telia's downstream revenues (as presented in the SSO) during the entire Period under Consideration, all of Telia's wholesale customers would still have had negative gross margins in practically all months in the Period under Consideration.<sup>36</sup>
52. In particular, when using Telenor's ARPU and AMBPU to model Telia's wholesale customers' margins, these change sign (i.e. turn from negative to positive), compared to the results presented in the SSO, in only seven of a total of 493 cases (i.e. customer-month pairs). Overall, in this robustness check, Telia's wholesale customers' margins are still negative in 480 cases (down from 487 in the calculations annexed to the SSO), out of a total of 493 cases.<sup>37</sup>
53. In the Authority's view, the fact that Telia's wholesale customers' margins are still, practically always, negative after using Telenor's ARPU (and AMBPU) confirms the robustness and validity of the results presented in the SSO,<sup>38</sup> which are maintained in the present Decision.

### 3.6 Failure to take into account applicable volume discounts

54. Telenor submits that the Authority fails to take into account volume discounts which applied to some of Telia's wholesale customers' amounts of data and voice inputs

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<sup>35</sup> As already noted, for consistency, together with Telenor's downstream revenues (ARPU), the Authority has also used Telenor's retail customers' data usage (AMBPU).

<sup>36</sup> For details of these calculations, see Document No 1116378 (confidential version) and Document No 1116433 (non-confidential version), and, in particular, the tab "Comparison Telenor ARPU+rebates", in conjunction with the tabs "Margin Calcs-Telenor ARPU & AMBPU", "Wholesale Calcs - Telenor AMBPU" and "Retail Calcs - Telia & Telenor". Telenor's ARPU and AMBPU used in these calculations have been sourced from Document No 1068848, annexed to the SSO.

<sup>37</sup> As already noted, the total number of cases in the Authority's calculations is 493 (and not the theoretical  $17 \times 60 = 1\,020$  cases), because not all 17 of Telia's wholesale customers were active in each one of the 60 months of the Period under Consideration.

The Authority's comparison is carried out in the tab "Comparison Telenor ARPU+rebates" of Document No 1116378 (confidential version) and Document No 1116433 (non-confidential version). See also the previous footnote for details of the Authority's calculations.

It should be noted that the results reported in the text above are from Document No 1116378 (confidential version) and may differ, in some cases, from those in Document No 1116433 (non-confidential version), because the latter does not include three of Telia's wholesale customers (as information about them was deemed to be confidential). The Authority made Document No 1116378 (confidential version) accessible to Telenor's external legal and economic advisors through a data room procedure.

<sup>38</sup> See footnote 13 of this Annex.

purchased, such as those in one of Telia's contracts with Tele2 and one of the confidential contracts included in the Data Room (customer C).<sup>39</sup>

55. According to Telenor, by failing to include these discounts in its modelling and calculating the average wholesale cost per MB on the basis of invoiced amounts for data (without adjusting such amounts for volume discounts), the Authority understates the margins available to Telia's wholesale customers.
56. In this respect, the Authority notes that, in the wholesale agreements provided by Telia in its reply to the Authority's request for information of 13 February 2017,<sup>40</sup> it can be seen that, during the Period under Consideration, several of Telia's wholesale customers were entitled to volume discounts on voice traffic only. It can also be seen that only some wholesale customers could benefit from a discount on both voice and data traffic. Moreover, the discount rate increased stepwise with the amount of traffic, from [0-20]% – and, only in one case ([CONFIDENTIAL]), of [0-20]%.<sup>41</sup>
57. In order to address Telenor's objection in this respect, as a sensitivity/robustness check of the calculations presented in the SSO and on a conservative basis to Telenor's advantage, the Authority has examined to what extent a single, uniform discount rate of [0-20]%, granted to all of Telia's wholesale customers for the entire Period under Consideration would affect its results.
58. In the Authority's view, this approach is very conservative, because, as noted in the previous paragraph, the maximum discount rate granted by Telia was, in most cases, much lower than [0-20]% and, in many cases, only applied to voice traffic. Moreover, the maximum rate was only applicable to the last tranche of traffic volume and not all of Telia's wholesale customers were able to qualify for that maximum rate, because their volumes were below the corresponding threshold.
59. The results of this sensitivity/robustness check show that, even assuming a single, uniform discount rate of [0-20]%, and, in addition, using Telenor's retail prices and Telenor's retail customers' data usage (ARPU and AMBPU, as discussed in the previous section), Telia's wholesale customers' gross margins are still, practically always, negative.<sup>42</sup>

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<sup>39</sup> See Section 7.4 of Annex 1 to the Reply to the SSO – CRA Comments. For Tele2's wholesale contract with Telia, see Document No 847815.

<sup>40</sup> See footnote 2 of this Annex.

<sup>41</sup> In the case of Tele2, for example, the discount scale was the following: [0-20]%, if Tele2's traffic volume on Telia's network was between [CONFIDENTIAL] and [CONFIDENTIAL] minutes; [0-20]%, for a traffic volume between [CONFIDENTIAL] and [CONFIDENTIAL] minutes; [0-20]%, for a traffic volume between [CONFIDENTIAL] and [CONFIDENTIAL] minutes; and [0-20]%, if Tele2's traffic volume on Telia's network exceeded [CONFIDENTIAL] minutes per month. See Document No 847815, Tele2's wholesale contract with Telia, Annex B2.

<sup>42</sup> For details of these calculations, see Document No 1116378 (confidential version) and Document No 1116433 (non-confidential version), and, in particular, the tab "Comparison Telenor ARPU+rebates", in conjunction with the tabs "Margin Calcs-Telenor ARPU & AMBPU", "Wholesale Calcs - Telenor AMBPU" and "Retail Calcs - Telia & Telenor".

60. In particular, in this robustness check, Telia's wholesale customers' margins change sign (i.e. turn from negative to positive), compared to the results presented in the SSO, in only eleven of a total of 493 cases (i.e. customer-month pairs). Overall, after this robustness check, Telia's wholesale customers' margins are still negative in 476 cases (down from 487 in the calculations annexed to the SSO), out of a total of 493 cases.<sup>43</sup>
61. In the Authority's view, the fact that, in this robustness check, Telia's wholesale customers' gross margins are still, practically always, negative – after using Telenor's ARPU and AMBPU and, in addition, applying a uniform discount rate of [0-20]% to Telia's wholesale prices – confirms the robustness and validity of the results presented in the SSO,<sup>44</sup> which are maintained in the present Decision.

### 3.7 Failure to model Tele2's own network use

62. Telenor submits that the Authority fails to take into account that Tele2 used its own network (namely that of Mobile Norway) to convey some of its mobile data requirements during the Period under Consideration, for which – in Telenor's view – it incurred low (if not zero) incremental costs.<sup>45</sup>
63. By way of background, it is worth recalling that Tele2 was a wholesale customer of Telenor until 31 March 2008, when it changed wholesale access provider by switching to Telia.<sup>46</sup> Tele2 then remained a wholesale customer of Telia until 2014.
64. Moreover, Tele2 was initially a co-owner (jointly with NwN, with 50% each) of Mobile Norway, which was in the process of rolling out its own mobile network in Norway

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The discount rate is set in cell B2 of the "Wholesale Calcs - Telenor AMBPU" for all of Telia's wholesale customers and for all months of the Period under Consideration.

<sup>43</sup> As already noted, the total number of cases in the Authority's calculations is 493 (and not the theoretical  $17 \times 60 = 1\,020$  cases), because not all 17 of Telia's wholesale customers are active in each one of the 60 months of the Period under Consideration.

The Authority's comparison is carried out in the tab "Comparison Telenor ARPU+rebates" of Document No 1116378 (confidential version) and Document No 1116433 (non-confidential version). See also the previous footnote for details of the Authority's calculations.

It should be noted that the results reported in the text above are from Document No 1116378 (confidential version) and may differ, in some cases, from those in Document No 1116433 (non-confidential version), because the latter does not include three of Telia's wholesale customers (as information about them was deemed to be confidential). The Authority made Document No 1116378 (confidential version) accessible to Telenor's external legal and economic advisors through a data room procedure.

<sup>44</sup> See footnote 13 of this Annex.

<sup>45</sup> See Section 7.5 of Annex 1 to the Reply to the SSO – CRA Comments and Section 3.2.3.3 of the Reply to the LoF.

<sup>46</sup> See paragraph 514 of the Decision.

during the Period under Consideration.<sup>47</sup> Then, in late 2011, Tele2 acquired 100% percent of the shares in NwN, thus acquiring also full ownership of Mobile Norway.<sup>48</sup>

65. As to Telenor's specific objection regarding the Authority's failure to model Tele2's use of its own network, as a sensitivity/robustness check (and while not accepting that Telenor is correct in its objection), the Authority has also considered whether it was possible for Tele2 to earn overall positive gross margins during the Period under Consideration, when conveying more data on Mobile Norway's network and less on Telia's one. This would depend, among other things (e.g. Tele2's retail price), on two factors: (i) the extent to which the incremental cost<sup>49</sup> of conveying data on Mobile Norway's network was cheaper than using Telia's network<sup>50</sup>; and (ii) the share of data traffic carried over Telia's network.
66. The Authority does not have information about the difference between Mobile Norway's incremental cost and the wholesale tariff paid by Tele2 to Telia.<sup>51</sup>
67. As to the share of Tele2's data traffic conveyed on Mobile Norway's network, the Authority notes that, in 2016, Nkom reported that, in January 2015 (i.e. four years after Tele2 had acquired NwN and thus full ownership of Mobile Norway), Tele2's share of

<sup>47</sup> As explained in Section 9.2.2.2 of the Decision, Mobile Norway's roll-out of its own mobile network was not particularly successful. Throughout the Period under Consideration, Mobile Norway's network lacked nationwide coverage, which obliged its joint owners Tele2 and NwN to buy wholesale access from established MNOs (i.e. Telia and Telenor, respectively). In particular, Mobile Norway covered less than 17% of the population in July 2009, around 42% in January 2012 and around 65% by early 2013 (see paragraph 247 of the Reply to the SO). Mobile Norway announced that it had reached a coverage of 75% only at the end of 2013. However, afterwards, it stopped further build-outs of its network, since it was not successful in winning frequencies in the spectrum auction that took place in December 2013. See Nkom's 2016 Market Analysis, Section 3.5.1. See also paragraph 76 of the Decision.

<sup>48</sup> See paragraph 74 of the Decision.

<sup>49</sup> The Authority does not agree with Telenor that the incremental cost of conveying data on Mobile Norway's network is the appropriate cost benchmark to use in a comparison with Telia's wholesale tariff, since Mobile Norway was still building its network during the Period under Consideration and this should likely be reflected in the cost benchmark to be used. In the text above and in the corresponding footnotes, the Authority refers to Mobile Norway's incremental cost, for the sake of the argument and in order to be conservative (to Telenor's advantage).

<sup>50</sup> By way of example, consider the following simple model. Let  $cT$  and  $cMN$  be Telia's wholesale tariff charged to Tele2 and Mobile Norway's incremental cost of conveying data, respectively. Let also  $cMN$  be a fraction of  $cT$ :  $cMN = k * cT$ , with  $0 < k < 1$  (i.e. Mobile Norway's incremental cost is some fraction of Telia's wholesale tariff). Let  $a$  denote the share of Tele2's total data traffic conveyed on Telia's network; the complement  $(1 - a)$  is then the share of Tele2's total data traffic conveyed over Mobile Norway's network. Finally, let  $p$  denote the retail unit price earned by Tele2 for selling MBB on the downstream market (which is the same, whether Tele2 uses Telia's or Mobile Norway's network).

Using this notation, Tele2's overall gross margin is, then, simply the following weighted average:  $m = a * (p - cT) + (1 - a) * (p - cMN)$ . Since  $cMN = k * cT$ , after substituting, Tele2's overall gross margin is given by:  $m = a * (p - cT) + (1 - a) * (p - k * cT)$ . Note that, when Tele2 only uses Telia's network (i.e.  $a = 100\%$ ), its overall gross margin is simply:  $m = p - cT$ . Likewise, when the cost of using Telia's network is the same as using Mobile Norway's network (i.e.  $k = 1$ ), Tele2's gross margin is also equal to:  $m = p - cT$ , irrespective of whether Tele2 uses Telia's or Mobile Norway's network. Finally, when Tele2 only uses Mobile Norway's network (i.e.  $a = 0\%$ ), its overall gross margin is:  $m = p - k * cT$  (which increases as  $k$  becomes smaller).

<sup>51</sup> In the example presented in the previous footnote, this difference is denoted by the parameter  $k$ .

data traffic on its own network was 43.8%; and that the corresponding share of voice traffic was 44.2%.<sup>52</sup>

68. In addition, in 2015, the Norwegian NCA also noted that, although Mobile Norway's mobile network had a population coverage of 75%, its owners Tele2 and Network Norway experienced a non-insignificant degree of "traffic leakage" and less than 50% of traffic to Tele2's and NwN's subscribers therefore entered Mobile Norway's network, with the remaining traffic going through Telenor's and Telia's mobile networks through national roaming agreements.<sup>53</sup>
69. Tele2 itself noted that its on-net traffic volume had continued to increase throughout 2013 and had reached 45% in December 2013 (i.e. one year after the end of the Period under Consideration).<sup>54</sup>
70. On the basis of this information about Tele2's share of traffic conveyed on Mobile Norway's network, the Authority has carried out a number of sensitivity calculations, in order to check whether Tele2 could have earned positive gross margins during the Period under Consideration by using its own network more for its data traffic.<sup>55</sup> These

<sup>52</sup> See Nkom's 2016 Market Analysis, footnotes 74 and 76.

<sup>53</sup> See Document No 1075334, the Norwegian NCA's Merger Decision V2015-1, paragraph 76: "*Selv om mobilnettet til Mobile Norway har en befolkningsdekning på 75 prosent, opplever Tele2 Norge og Network Norway en ikke ubetydelig grad av trafikklekkasje, og under 50 prosent av trafikken til abonnentene til Tele2 og Network Norway går derfor i Mobile Norways nett. Den resterende trafikken går i Telenors og TeliaSoneras mobilnett via avtaler om nasjonal gjesting.*" (The Authority's translation: "*Although Mobile Norway's mobile network has a population coverage of 75 per cent, Tele2 Norway and Network Norway experience a not insignificant degree of traffic leakage, and less than 50 per cent of the traffic to Tele2 and Network Norway's subscribers therefore goes on Mobile Norway's network. The remaining traffic goes through Telenor's and TeliaSonera's mobile networks through agreements on national roaming.*")

The Norwegian NCA referred to figures provided by Nkom and its own figures collected for the purpose of the merger inquiry suggested that Tele2's traffic on its network was between 45% and 50% at the time of the inquiry (i.e. between July 2014 and February 2015), see footnote 43 of the Norwegian NCA's Decision V2015-1. The Norwegian NCA indicated two reasons for the traffic leakage, see footnote 44 of the Norwegian NCA's Decision V2015-1. First, the existence of one-way (as opposed to two-way) hand-overs (whereby a call originating in Mobile Norway's network is delivered through the guest network – Telenor or Telia – if the mobile subscriber moves outside the coverage area of Mobile Norway, but is then not returned to Mobile Norway's network). Second, the choice by Tele2's subscribers to lock their mobile phone to use the guest network rather than Mobile Norway's network.

<sup>54</sup> See page 14 of Tele2's annual report for 2013 (Document No 1115908): "*The roll-out of Tele2 Norway's own mobile network has been a key priority during the year. By the end of 2013, Tele2 Norway had 75 percent population coverage, while the traffic volume to Tele2's own network continued to increase throughout the year, reaching 45 percent in December 2013.*" See also page 49 of Tele2's annual report for 2012 (Document No 1115911), where Tele2 notes delays in the roll-out of the mobile network: "*The roll-out of Tele2 Norway's own mobile network has been a key priority during the year. By the end of 2012, Tele2 Norway had 66 percent population coverage, while the traffic volume to Tele2's own network continued to increase throughout the year. The roll-out progressed according to plan in the first half of 2012, but was delayed in the second half of the year mainly due to colocation problems with competitors.*"

In Section 3.2.3.3 of its Reply to the LoF, Telenor refers to paragraph 219 of the Norwegian NCA's Decision V2018-20. According to Telenor, in that paragraph, it is noted that Tele2 reported to the Nkom a population coverage of 56.9% in July 2012.

<sup>55</sup> To check whether Tele2's gross margins were positive, the Authority has made the following assumptions. The share of Tele2's traffic carried on Telia's network (denoted by the parameter  $a$ ) is (conservatively) set to 80% in

calculations show that, even with the most conservative assumptions (to the advantage of Telenor), Tele2 would have earned positive *gross* margins only in a limited number of months (i.e. 10 months out of a total of 60).<sup>56</sup> Moreover, even in those months where Tele2 would have earned positive gross margins, these margins were small.<sup>57</sup>

71. In Section 3.2.3.3 of its Reply to the LoF, Telenor reiterates that Mobile Norway's incremental cost of using its own network (denoted by the parameter cMN in the previous footnotes) should be set to 0. As noted above,<sup>58</sup> the Authority does not agree with Telenor that the incremental cost of using Mobile Norway's network is the appropriate cost benchmark in this case, because Mobile Network was still building its network during the Period under Consideration and this should likely be reflected in the cost benchmark to be used. Further, even if Mobile Norway's incremental cost were the appropriate cost benchmark to use, this is unlikely to be equal to 0.<sup>59</sup>
72. In any event, even if Mobile Norway's incremental cost of using its own network were set to 0, which the Authority does not consider appropriate, this would result in Tele2 reporting positive gross margins in only 17 months out of a total of 60 (as opposed to 10 months in the Authority's most conservative approach, which is already based on assumptions which are significantly to Telenor's advantage). Moreover, in Telenor's revised calculations, Tele2's positive gross margins would still be small.<sup>60</sup> The Authority recalls that this is without taking into consideration any downstream costs at all. Were

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2008, 2009 and 2010; and to 70% in 2011 and 2012; as noted in the text, this share was likely higher in all years. For the parameter k, the Authority has used a value of 0.2 (to be conservative) and, alternatively, of 0.8, given the lack of information about Mobile Norway's incremental cost. Moreover, p is Telenor's ARPU (inclusive of incremental downstream revenues) and cT is Tele2's wholesale cost per user (inclusive of a volume discount of [0-20]%, as explained in Section 3.6 of the present Annex). The Authority's calculations are included in the tab "Tele2's own network use" of Document No 1116378 (confidential version) and Document No 1116433 (non-confidential version).

<sup>56</sup> In the Authority's calculations, when the parameter k is set (conservatively) to 0.2, Tele2 reports positive gross margins in March and August 2010, between March and September 2012 and in November 2012 (i.e. 10 months out of a total of 60). When the parameter k is set to 0.8, Tele2 reports positive gross margins only in March and August 2010 (i.e. two months out of a total of 60).

<sup>57</sup> In particular, in the Authority's calculations, when k is set equal to 0.2, Tele2's average *positive* gross margin is equal to NOK 35 per month/user and its average *negative* gross margin to minus NOK 1 033 per month/user. When k is set equal to 0.8, Tele2's average *positive* gross margin is instead equal to NOK 111 per month/user and its average *negative* gross margin to minus NOK 1 048 per month/user. As noted in the text above, Tele2 reports positive gross margins in 10 months when k is set equal to 0.2 and in 2 months when k is set equal to 0.8.

<sup>58</sup> See footnote 49 of this Annex.

<sup>59</sup> As noted above, the Authority has conservatively set it equal to 20% of Telia's wholesale tariff charged to Tele2 (i.e. k = 0.2).

<sup>60</sup> See Appendix 2 to the Reply to the LoF (Document No 1123015), in particular the tab "Tele2's own network use" (where Telenor also uses revised figures for Telia's wholesale tariff charged to Tele2 between March 2010 and December 2012, as discussed in Section 3.3 of the present Annex).

In Telenor's revised calculations, Tele2's average *positive* gross margin is equal to NOK 42 per month/user and its average *negative* gross margin to minus NOK 1 105 per month/user.

those costs to be included even partially, the small positive margins calculated by Telenor would, in all likelihood, turn negative.<sup>61</sup>

73. Accordingly, in the Authority's view, and contrary to what Telenor argues, the results of this robustness check – even after taking Telenor's observations into account – confirm the robustness and validity of the results presented in the SSO,<sup>62</sup> which are maintained in the present Decision.

#### 4 CONCLUSION

74. In light of the foregoing, after taking into account Telenor's observations and carrying out an extensive set of sensitivity/robustness checks, the Authority maintains its calculations of Telia's wholesale customers' margins as set out in the SSO (see "Margin Calculations" tab of Document No 1074655 for the confidential version of the spreadsheet model annexed by the Authority to the SSO; and, Document No 1074657 for the non-confidential version).
75. For convenience, the Authority's calculations from the non-confidential version (Document No 1074657) are reproduced in Table 17 below. Gross margins for Lycamobile, Maingate and Telio/NextGentel are not reported for reasons of confidentiality.

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<sup>61</sup> See footnote 26 of this Annex for details about downstream costs.

<sup>62</sup> See the Authority's Annex to the SSO (Document No 1076031). The accompanying spreadsheet model prepared by the Authority was included as Document No 1074655 (confidential version) and Document No 1074657 (non-confidential version).





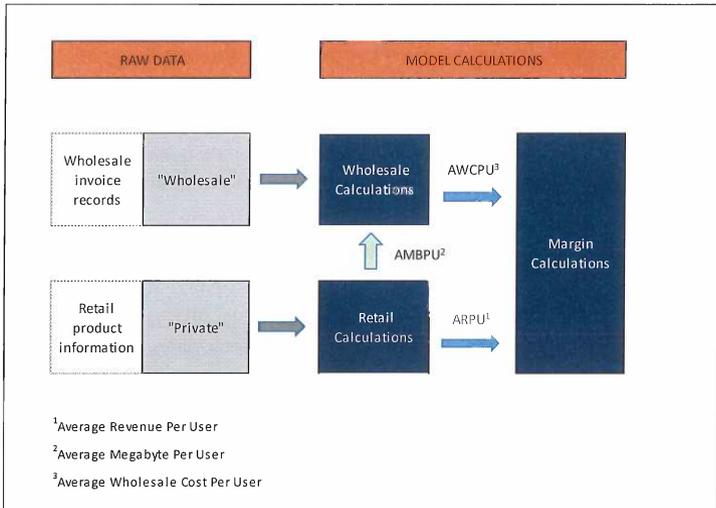


**APPENDIX TO ANNEX 2: DESCRIPTION OF THE MODEL USED TO CALCULATE  
TELIA'S WHOLESALE CUSTOMERS' MARGINS**

**Introduction**

1. The spreadsheet model prepared by the Authority is structured in two main parts, namely “Raw Data” and “Model Calculations”, as shown in Figure 10 below.<sup>1</sup>

**Figure 10**



**Raw data**

2. The “Raw Data” section contains the input data used in the calculations, as submitted to the Authority by Telia.<sup>2</sup>

**Worksheet “Raw Data - Private”**

3. The worksheet “Raw Data - Private” contains historical data for 22 individual stand-alone MBB products (tariff plans) offered by Telia to residential customers during the Period under Consideration and includes information on the number of subscribers, data traffic, fixed and variable revenue, list prices, included data volume, speed and commercial availability.
4. The relevant sections of this worksheet are directly linked to the “Retail Calculations” worksheet in the model, in order to calculate Telia’s monthly Average Revenue Per User (“ARPU”) and Average Megabyte Per User (“AMBPU”) for its residential stand-alone MBB portfolio during the Period under Consideration.

<sup>1</sup> See Document No 1074655 for the confidential version of the Authority’s spreadsheet model and Document No 1074657 for the non-confidential version.

<sup>2</sup> See footnote 2 of Annex 2 to this Decision.

***Worksheet “Raw Data - Wholesale”***

5. The worksheet “Raw Data - Wholesale” contains historical billing/invoice records for each of Telia’s wholesale customers.
6. The relevant sections of this worksheet are directly linked to the “Wholesale Calculations” worksheet, in order to calculate the monthly Average Wholesale Cost Per User (“AWCPU”) for each of Telia’s wholesale customers for the Period under Consideration.

**Model calculations*****Worksheet “Retail Calculations”***

7. The worksheet “Retail Calculations” displays the “total number of subscribers”, “total revenue” and “total data traffic volume” for Telia’s residential stand-alone MBB portfolio, in each month over the Period under Consideration. These numbers are pulled from the worksheet “Raw Data - Private”.
8. Telia’s ARPU is calculated as the sum of the total revenues for a given month, divided by the total number of subscribers.
9. The worksheet also calculates Telia’s AMBPU as the total consumption of data traffic in a given month, divided by the total number of subscribers.

***Worksheet “Wholesale Calculations”***

10. The worksheet “Wholesale Calculations” displays Telia’s AMBPU as calculated in the worksheet “Retail Calculations”.
11. It also pulls from the worksheet “Raw data - Wholesale” the monthly “Total Billed Mobile Data” and the “Total data traffic” for each of Telia’s wholesale customers, which are used to calculate the Wholesale price per MB (equal to the Total Billed Mobile Data divided by the Total data traffic).
12. This is in turn multiplied by Telia’s AMBPU to arrive at each wholesale customer’s AWCPU (Average Wholesale Cost Per User).

***Worksheet “Margin Calculations”***

13. The worksheet “Margin Calculations” pulls Telia’s ARPU from the “Retail Calculations” worksheet as well as the AWCPU for each of its wholesale customers from the “Wholesale Calculations” worksheet.
14. The monthly Average Margin Per User (“AMPU”) is then calculated as the difference between Telia’s ARPU and each wholesale customer’s AWCPU in each month. This is the gross margin that a competitor buying access from Telia and which is as efficient as Telia would have earned by selling stand-alone MBB services to residential customers in each month.
15. Illustrative annual averages for each wholesale customer of Telia are also calculated.