



EUROPEAN COMMISSION
DG Competition

CASE M.8792 - T-Mobile NL/Tele2 NL

(Only the English text is authentic)

MERGER PROCEDURE REGULATION (EC) 139/2004

Article 8 (1) Regulation (EC) 139/2004

Date: 27/11/2018

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Brussels, 27.11.2018
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PUBLIC VERSION

COMMISSION DECISION

of 27.11.2018

**declaring a concentration to be compatible with the internal market
and the functioning of the EEA Agreement**

(Case M.8792 - T-Mobile NL/Tele2 NL)

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TABLE OF CONTENTS

1.	Introduction	11
2.	The Parties and the Transaction	12
3.	Union dimension	13
4.	The procedure.....	13
5.	The investigation.....	14
6.	The Dutch mobile telecommunications sector	15
6.1.	Key metrics	15
6.1.1.	Data sources	15
6.1.2.	Technological development	16
6.1.3.	Retail mobile telecommunications services in the Netherlands.....	17
6.1.4.	Retail customer groups.....	24
6.2.	Customer switching.....	25
6.3.	Mobile telecommunications service providers in the Netherlands	25
6.3.1.	MNOs.....	25
6.3.1.1.	KPN.....	26
6.3.1.2.	VodafoneZiggo	26
6.3.1.3.	TMNL	27
6.3.1.4.	Tele2 NL	28
6.3.1.5.	Spectrum holdings by the MNOs.....	28
6.3.1.6.	Mobile telecommunications infrastructure	29
A.	Site construction.....	29
B.	Network sharing	32
6.3.1.7.	Agreements between the MNOs	33
6.3.2.	Other telecommunications services providers	34
6.3.2.1.	Simpel	34
6.3.2.2.	Youfone.....	35
6.3.2.3.	Other MVNOs.....	35
6.3.2.4.	Regulatory regime regarding MVNOs.....	36
6.4.	Convergence and multi-play offers	36
6.5.	Distribution system	39
6.6.	Competitive conditions	40
6.6.1.	Competitive parameters	41
6.6.2.	Overview of price related competition.....	42

7.	Relevant markets	43
7.1.	Retail mobile telecommunication services.....	43
7.1.1.	Product market definition.....	43
7.1.1.1.	Retail mobile and fixed telecommunication services.....	43
A.	Commission precedent	43
B.	The Notifying Party's views	44
C.	The Commission's assessment	44
7.1.1.2.	Mobile services and WiFi	44
A.	Commission precedent	44
B.	The Notifying Party's views	45
C.	The Commission's assessment	45
7.1.1.3.	Mobile telecommunications services and OTT services.....	45
A.	Commission precedent	45
B.	The Notifying Party's views	45
C.	The Commission's assessment	46
7.1.1.4.	Private and business customers	46
A.	Commission precedent	46
B.	The Notifying Party's views	47
C.	The Commission's assessment	47
(i)	Demand side.....	47
(ii)	Supply side	50
(iii)	Conclusion.....	50
7.1.1.5.	Prepaid and postpaid	51
A.	Commission precedent	51
B.	The Notifying Party's views	51
C.	The Commission's assessment	51
7.1.1.6.	SIM-only subscriptions/handset subscriptions.....	51
A.	Commission precedent	51
B.	The Notifying Party's views	51
C.	The Commission's assessment	52
7.1.1.7.	Technology: 2G, 3G, 4G.....	52
A.	Commission precedent	52
B.	The Notifying Party's views	52
C.	The Commission's assessment	52
7.1.1.8.	Voice, SMS/MMS and data services	52
A.	Commission precedent	52

B.	The Notifying Party's views	52
C.	The Commission's assessment	53
7.1.1.9.	Fixed-mobile bundles	53
A.	Commission precedent	53
B.	The Notifying Party's views	53
C.	The Commission's assessment	53
7.1.1.10.	M2M.....	54
A.	Commission precedent	54
B.	The Notifying Party's views	54
C.	The Commission's assessment	54
7.1.1.11.	Distribution channel	55
A.	Commission precedent	55
B.	The Notifying Party's views	55
C.	The Commission's assessment	55
7.1.1.12.	Conclusion.....	55
7.1.2.	Geographic market definition	55
7.1.2.1.	Commission precedent	55
7.1.2.2.	Notifying Party's views	55
7.1.2.3.	Commission's assessment	56
7.1.2.4.	Overall conclusion	56
7.2.	Wholesale mobile telecommunication services	56
7.2.1.	Wholesale services for access and call origination on mobile network.....	56
7.2.1.1.	Product market definition.....	56
A.	Commission precedent	56
B.	Notifying Party's views	57
C.	Commission's assessment	57
7.2.1.2.	Geographic market definition	57
A.	Commission precedent	57
B.	Notifying Party's views	57
C.	Commission's assessment	57
7.2.2.	Wholesale market for international roaming.....	57
7.2.2.1.	Product market definition.....	57
A.	Commission precedent	57
B.	Notifying Party's view.....	58
C.	Commission's assessment	58
7.2.2.2.	Geographic market definition	59

A.	Commission precedent	59
B.	Notifying Party's view	59
C.	Commission's assessment	59
7.2.3.	Wholesale markets for mobile and fixed call termination	59
7.2.3.1.	Product market definition.....	59
A.	Commission precedent	59
B.	Notifying Party's view.....	60
C.	Commission's assessment	60
7.2.3.2.	Geographic market definition	60
A.	Commission precedent	60
B.	Notifying Party's view.....	60
C.	Commission's assessment	60
7.3.	Retail and wholesale markets for fixed telecommunication services	61
7.3.1.	Retail market for the supply of fixed internet access services	61
7.3.1.1.	Product market definition.....	61
A.	Commission precedent	61
B.	Notifying Party's views	61
C.	Commission's assessment	61
7.3.1.2.	Geographic market definition	61
7.3.2.	Retail supply of fixed telephony services	61
7.3.2.1.	Product market definition.....	61
A.	Commission precedent	61
B.	Notifying Party's views	62
C.	Commission's assessment	62
7.3.2.2.	Geographic market definition	62
7.3.3.	Retail supply of television services.....	62
7.3.3.1.	Product market definition.....	62
A.	Commission precedent	62
B.	Notifying Party's views	63
C.	Commission's assessment	63
7.3.3.2.	Geographic market definition	63
7.3.4.	Retail market for business connectivity services	63
7.3.4.1.	Product market definition.....	63
A.	Commission precedent	63
B.	Notifying Party's views	63
C.	The Commission's assessment	64

7.3.4.2. Geographic market definition	64
7.3.5. Wholesale leased lines	64
7.3.5.1. Product market definition.....	64
A. Commission precedent	64
B. Notifying Party's views	64
C. The Commission's assessment	64
7.3.5.2. Geographic market definition	64
7.3.6. Wholesale provision of domestic call transit services on fixed networks	65
7.3.6.1. Product market definition.....	65
A. Commission precedent	65
B. Notifying Party's views	65
C. Commission's assessment	65
7.3.6.2. Geographic market definition	65
7.3.7. Wholesale markets for mobile and fixed call termination	65
7.3.7.1. Product market definition.....	65
A. Commission precedent	65
B. Notifying Party's views	66
C. Commission's assessment	66
7.3.7.2. Geographic market definition	66
7.3.8. Wholesale termination and hosting calls to non-geographic numbers.....	67
7.3.8.1. Product market definition.....	67
A. Commission precedent	67
B. Notifying Party's views	67
C. The Commission's assessment	67
7.3.8.2. Geographic market definition	67
7.3.9. Global telecommunication services	67
7.3.9.1. Product market definition.....	67
A. Commission precedent	67
B. Notifying Party's views	68
C. The Commission's assessment	68
7.3.9.2. Geographic market definition	68
7.3.10. Retail global business connectivity services	69
7.3.10.1. Product market definition.....	69
A. Commission precedent	69
B. Notifying Party's views	69
C. The Commission's assessment	69

7.3.10.2. Geographic market definition	69
7.3.11. Retail supply of fixed multiple play services	69
7.3.11.1. Product market definition	69
A. Commission precedent	69
B. Notifying Party's view	70
C. Commission assessment	70
7.3.11.2. Geographic market definition	70
7.4. Affected markets	70
7.4.1. Horizontally affected markets	70
7.4.2. Vertically affected markets	71
8. Competitive assessment	73
8.1. Legal test	73
8.2. Market shares and concentrations levels	77
8.2.1. Introduction	77
8.2.2. Market shares	79
8.2.2.1. Market for retail mobile telecommunications services in the Netherlands	79
8.2.2.2. Segment shares for retail mobile telecommunication services to private customers and sub-segments	80
8.2.2.3. Segment for retail mobile telecommunication services to business customers	83
8.2.3. Concentration levels	84
8.3. Non-coordinated horizontal effects on the market for retail mobile telecommunication services in the Netherlands	85
8.3.1. Competitive strength of TMNL	87
8.3.1.1. Notifying Party's views	87
8.3.1.2. Commission's assessment	87
A. Assessment of market shares	87
B. TMNL's aggressive competitive behaviour	88
C. Performance with respect to the main competitive parameters	89
(i) Price related competition	89
(ii) Network based competition	89
(iii) Other relevant parameters	90
D. Conclusion on TMNL's competitive strength	91
8.3.2. Competitive strength of Tele2 NL	91
8.3.2.1. Notifying Party's views	91
8.3.2.2. Commission's assessment	92
A. Competitive strength of Tele2 NL pre-Transaction	93
(i) Assessment of market shares	93

(ii)	Tele2 NL's competitive behaviour and performance.....	93
(a)	Tele2 NL's entry as a fourth MNO in the Netherlands	93
(b)	Tele2 NL's mobile-only strategy following its entry as a new MNO	95
(iii)	Tele2 NL's network limitations	97
B.	Likely competitive strength of Tele2 NL absent the Transaction.....	99
(i)	Introduction	99
(ii)	Scenario 1: Tele2 NL will continue to operate on the Dutch market [on the same basis]	100
(a)	Feedback of the Market Investigation.....	100
(b)	Commercial and network strategy of Tele2 NL.....	101
(c)	Recent trends	102
(d)	Network situation	103
(iii)	Scenario 2: Tele2 NL will stop operating on the Dutch market [on the same basis]	108
(iv)	Conclusion on competitive strength of Tele2 NL	109
8.3.3.	Competitive strength of KPN.....	109
8.3.3.1.	Notifying Party's views	109
8.3.3.2.	Commission's assessment	109
8.3.3.3.	Conclusion.....	110
8.3.4.	Competitive strength of VodafoneZiggo	110
8.3.4.1.	Notifying Party's views	110
8.3.4.2.	Commission's assessment	111
8.3.4.3.	Conclusion.....	112
8.3.5.	Competitive strength of MVNOs	112
8.3.5.1.	Notifying Party's views	112
8.3.5.2.	Commission's assessment	113
A.	Types of MVNOs	113
B.	Specific MVNOs	116
C.	Limited ability of MVNOs to compete in the present market conditions due to their reliance on the wholesale conditions.....	119
(i)	Wholesale access terms limits MVNOs' ability to compete on price	120
(ii)	MVNOs have limited ability to compete on product differentiation and innovation	124
8.3.5.3.	Conclusion.....	126
8.3.6.	Closeness of competition between TMNL and Tele2 NL	126
8.3.6.1.	Notifying Party's views	126
8.3.6.2.	Commission's assessment	127

A.	Qualitative evidence on closeness of competition	127
(i)	The Parties' business strategy	127
(a)	TMNL and Tele2 NL both currently focus on a mobile-only strategy	128
(b)	Common features in terms of customer focus.....	129
(ii)	The Parties' positioning with respect to the most important parameters of competition	130
(a)	Pricing	131
(b)	Network characteristics	132
(iii)	Conclusion on qualitative evidence	132
B.	Quantitative evidence on closeness of competition	133
8.3.6.3.	Conclusions on closeness of competition	136
8.3.7.	Complaints regarding the vertical interrelation between the wholesale and the retail mobile market.....	136
8.3.7.1.	Complaint from Simpel.....	136
8.3.7.2.	Notifying Party's views	137
8.3.7.3.	Commission's assessment	137
A.	Ability to deteriorate Simpel's competitive position.....	137
(i)	Wholesale agreement terms	137
(ii)	Concentrated wholesale market	138
(a)	KPN.....	138
(b)	VodafoneZiggo	138
(c)	Tele2 NL	139
(d)	Summary	139
(iii)	High switching costs	139
B.	Incentive to deteriorate Simpel's competitive position	141
C.	Effects	143
8.3.7.4.	Conclusion.....	144
8.3.8.	Spectrum asymmetry.....	144
8.3.9.	Distributor complaints.....	146
8.3.9.1.	Views of distributors	146
8.3.9.2.	Notifying Party's views	146
8.3.9.3.	Commission's assessment	146
8.3.10.	Quantitative analysis of the likely price effects of the Transaction.....	147
8.3.10.1.	Introduction.....	147
8.3.10.2.	Outline of the analysis.....	148
8.3.10.3.	Results.....	149
8.3.10.4.	Quantitative analysis submitted by the Notifying Party	151

8.3.11.	Conclusion on non-coordinated horizontal effects	152
8.4.	Coordinated horizontal effects on the market for retail mobile telecommunication services in the Netherlands.....	152
8.4.1.	Notifying Party's views	152
8.4.2.	Commission's assessment	153
8.4.2.1.	Possibility of establishing coordination	153
A.	Concentrated market with few players.....	153
B.	Market transparency.....	154
C.	Product differentiation	154
(i)	Mobile element composition.....	154
(ii)	FMC	155
(iii)	Handset subsidies	155
(iv)	Conclusion.....	155
D.	Symmetry	156
(i)	Market shares on the retail mobile market.....	156
(ii)	Degree of fixed / mobile integration	156
8.4.2.2.	Sustainability of coordination	158
A.	Monitoring.....	158
B.	Deterrent mechanism	158
C.	Reaction of outsiders.....	158
8.4.2.3.	Impact of the Transaction on the ability to reach and sustain a coordinated outcome	159
8.4.3.	Conclusion on horizontal coordinated effects.....	160
8.5.	Efficiencies.....	160
8.5.1.	Framework of assessment	161
8.5.2.	Elimination of double marginalisation concerning Tele2's NRA	162
8.5.2.1.	Notifying Party's view.....	162
8.5.2.2.	Commission's assessment	163
A.	Benefit to consumers.....	163
B.	Verifiability	163
C.	Merger specificity	164
8.5.2.3.	Conclusion on efficiencies related to elimination of the NRA	164
8.5.3.	Further efficiency claims.....	164
8.5.3.1.	Notifying Party's view.....	164
8.5.3.2.	Commission's assessment	165
8.5.4.	Conclusion on efficiencies	165
9.	Conclusion.....	165

COMMISSION DECISION

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(Case M.8792 - T-Mobile NL/Tele2 NL)

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THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to the Agreement on the European Economic Area, and in particular Article 57 thereof,

Having regard to Council Regulation (EC) No 139/2004 of 20.1.2004 on the control of concentrations between undertakings¹, and in particular Article 8(1) thereof,

Having regard to the Commission's decision of 12 June 2018 to initiate proceedings in this case,

Having given the undertakings concerned the opportunity to make known their views on the objections raised by the Commission,

Having regard to the opinion of the Advisory Committee on Concentrations²,

Having regard to the final report of the Hearing Officer in this case³,

Whereas:

1. INTRODUCTION

- (1) On 2 May 2018, the European Commission (the "Commission") received notification of a concentration pursuant to Article 4 of Council Regulation (EC) No 139/2004 (the "Merger Regulation"⁴) that would result from the proposed acquisition by Deutsche Telekom AG ("DTAG" or the "Notifying Party", Germany), through its indirect wholly owned subsidiary T-Mobile Netherlands Holding B.V. (Netherlands) ("TMNL"), of sole control of the entire undertaking Tele2 Netherlands Holding N.V. (Netherlands) ("Tele2 NL") within the meaning of Article 3(1)(b) of the Merger Regulation (the

¹ OJ L 24, 29.1.2004, p. 1. With effect from 1 December 2009, the Treaty on the Functioning of the European Union ("TFEU") has introduced certain changes, such as the replacement of "Community" by "Union" and "common market" by "internal market". The terminology of the TFEU will be used throughout this decision.

² OJ C200. , p....

³ OJ C200. , p....

⁴ OJ L 24, 29.1.2004, p. 1. With effect from 1 December 2009, the Treaty on the Functioning of the European Union ("TFEU") has introduced certain changes, such as the replacement of "Community" by "Union" and "common market" by "internal market". The terminology of the TFEU will be used throughout this Statement of Objections.

"Transaction")⁵. The undertaking comprising T-Mobile Netherlands Holding B.V. DTAG and its subsidiaries and Tele2 NL are hereinafter collectively referred to as the "Parties".

- (2) The recitals in this decision are arranged as follows. Section 2 describes the Parties and explains why the Transaction would result in a concentration. Section 3 explains why the concentration brought about by the Transaction has a Union dimension. Section 4 describes the procedure followed in this case. Section 5 describes the investigation undertaken by the Commission into the Transaction. Section 6 provides an overview of the mobile telecommunications sector in the Netherlands. Section 7 defines the relevant product and geographic markets. Section 8 sets out the Commission's assessment of whether the concentration brought about by the Transaction would significantly impede effective competition in each of the relevant markets. Section 9 sets out the Commission's conclusions.

2. THE PARTIES AND THE TRANSACTION

- (3) Both TMNL and Tele2 NL own mobile and (limited) fixed network infrastructure in the Kingdom of the Netherlands (the "Netherlands"), on the basis of which they provide fixed and mobile retail telecommunications services to both private and business customers as well as a number of wholesale services. TMNL is an indirect wholly owned subsidiary of DTAG, while Tele2 NL is an indirect wholly owned subsidiary of Tele2 AB (Sweden). DTAG is a telecommunications group with global operations, which is headquartered in Germany and listed on the Frankfurt Stock Exchange; its largest shareholder is the Federal Republic of Germany (31.9%).
- (4) According to a share purchase agreement entered into on 16 February 2018, TMNL has agreed to acquire all the outstanding share capital of Tele2 NL. In consideration of the Transaction, TMNL will pay EUR 190 million to Tele2 AB and issue additional shares in the share capital of TMNL to Tele2 AB. The Parties have agreed that TMNL's passive mobile network infrastructure business, which includes assets such as antenna towers and lease contracts for those towers, is outside the scope of the Transaction and will be transferred to Deutsche Telekom Europe B.V. (a wholly owned subsidiary of DTAG) prior to completion of the Transaction⁶. Accordingly, as a result of the Transaction: (i) TMNL would hold 100% of the issued share capital in Tele2 NL; (ii) Deutsche Telekom Europe B.V. and Tele2 AB will hold 75% and 25% of the total issued share capital in TMNL respectively; and (iii) the passive network infrastructure would no longer be part of TMNL. Tele2 AB's 25% shareholding in TMNL would not confer control and, thus, DTAG would retain sole control over TMNL and acquire sole control over Tele2 NL.

⁵ OJ C 162, 8.5.2018, p.27.

⁶ Also Tele2 NL's machine to machine ("M2M") business is carved-out from the Transaction. See Form CO, paragraph 71.

3. UNION DIMENSION

- (5) In 2017,⁷ the Parties had a combined aggregate world-wide turnover of more than EUR 5 000 million (DTAG: EUR 74 947,3 million; Tele2 NL: EUR 619,1 million; combined: EUR 75 566,4 million). In 2017, each of them had an EU-wide turnover in excess of EUR 250 million (DTAG: EUR [30-40] billion; Tele2 NL: EUR [600-700] million). Neither of the Parties achieved more than two-thirds of their aggregate Union-wide turnover within one and the same Member State⁸.
- (6) The concentration brought about by the Transaction therefore has a Union dimension within the meaning of Article 1(2) of the Merger Regulation.

4. THE PROCEDURE

- (7) The Transaction was notified on 2 May 2018.
- (8) After a preliminary examination of the notification and after the first phase investigation, the Commission raised serious doubts as to the compatibility of the Transaction with the internal market as regards the market for retail mobile telecommunications services and the market for wholesale access and call origination services in the Netherlands and adopted a decision to initiate proceedings pursuant to Article 6(1)(c) of the Merger Regulation on 12 June 2018 (the "Article 6(1)(c) Decision").
- (9) On 20 June 2018, the second phase investigation period was extended by 15 working days at the request of the Notifying Party pursuant to the first sentence of the second subparagraph of Article 10(3) of the Merger Regulation.
- (10) On 27 June 2018, the Notifying Party submitted its written comments to the Article 6(1)(c) Decision (the "Article 6(1)(c) Response").
- (11) On 10 July 2018, the Commission adopted a decision extending the second phase investigation period by five working days in accordance with the third sentence of the second subparagraph of Article 10(3) of the Merger Regulation.
- (12) On 27 July 2018, the Commission adopted a decision pursuant to Article 11(3) of the Merger Regulation addressed to Tele2 NL, (the "Tele2 NL Article 11(3) Decision") following Tele2 NL's failure to provide complete information in response to a request for information ("RFI") from the Commission. On the same day, the Commission adopted a second decision pursuant to Article 11(3) of the Merger Regulation addressed to TMNL (the "TMNL Article 11(3) Decision"), following TMNL's failure to provide complete information in response to a RFI from the Commission. Both the Tele2 NL Article 11(3) Decision and the TMNL Article 11(3) Decision compelled their addressees to submit a complete response to the RFIs originally sent by the Commission and had the effect of suspending the time limits referred to in the first subparagraph of Article 10(3) of the Merger Regulation. Tele2 NL complied with the Tele2 NL Article 11(3) Decision on 3 August 2018 and TMNL complied with the TMNL Article 11(3) Decision on 5 August 2018. As 5 August 2018 was not a

⁷ The last financial year for which data were available at the time of notification of the Transaction.

⁸ Turnover calculated in accordance with Article 5 of the Merger Regulation and with the Commission Consolidated Jurisdictional Notice under Council Regulation (EC) No 139/2004 on the control of concentrations between undertakings ("Consolidated Jurisdictional Notice"), OJ C 95, 16.4.2008, p. 1.

working day, pursuant to Article 9(4) of the Commission Regulation (EC) No 802/2004 (the "Implementing Regulation"),⁹ the suspension of the time limits expired at the end of the following working day, that is, on 6 August 2018.

- (13) Based on the second phase investigation which supplemented the findings of the first phase investigation (jointly referred to as the "Market Investigation"), the Commission issued a statement of objections on 12 September 2018 (the "Statement of Objections")¹⁰. In the Statement of Objections, the Commission came to the preliminary view that the Transaction would significantly impede effective competition in a substantial part of the internal market within the meaning of Article 2 of the Merger Regulation.
- (14) The access to file was first granted on 13 September 2018. Subsequent access to the file was granted on a rolling basis until the Advisory Committee. Access to confidential third party data and documents relied on by the Commission in the Statement of Objections was granted to the Parties' economic and legal advisors in accordance with the data room procedure¹¹.
- (15) The Parties submitted their written comments on the Statement of Objections on 28 September 2018 and a supplementary submission based on information made available with the data room procedure on 5 October 2018 (referred to together as the "Response to the Statement of Objections").
- (16) At the request of the Notifying Party, an oral hearing was held on 8 October 2018. Four parties were allowed to be heard as interested third persons in the proceedings pursuant to the second sentence of Article 18(4) of the Merger Regulation and all four participated in the oral hearing.
- (17) The Advisory Committee discussed the draft of this Decision on 14 November 2018 and issued a positive opinion¹².

5. THE INVESTIGATION

- (18) Prior to the notification of the Transaction, the Commission sent RFIs to the Parties, responses to which were included in the notification. The Commission also sent data requests to the Parties and the largest competitors of the Parties in the Netherlands. The Commission finally conducted interviews with the Parties' wholesale customers and competitors.

⁹ OJ L 133, 30.04.2004, p. 1-39, as amended by Commission Regulation (EC) No 1033/2008 (OJ L 279, 22.10.2008, p.3-12) and by Commission Implementing Regulation (EU) No 1269/2013 of 5 December 2013 (OJ L 336, 14.12.2013, p. 1-36).

¹⁰ Commission's document C(2018) 6038

¹¹ Business secrets and other confidential information of third parties within the meaning of Article 339 TFEU, Article 18(3) of the Merger Regulation and Article 17(3) of the Commission Implementing Regulation (EU) No 1269/2013 of 5 December 2013 amending Regulation (EC) No 802/2004 implementing Council Regulation (EC) No 139/2004 on the control of concentrations between undertakings (the "Implementing Regulation", OJ L 336, 14.12.2013, page 1-36) can exceptionally be made available to the addressee of a Statement of Objections within the framework of the data room procedure and under the strict conditions set out in data room rules. The data room procedures are set in the Best practices on the disclosure of information in data rooms, 2 June 2015, available at http://ec.europa.eu/competition/mergers/legislation/legislation.html#best_practices

¹² At the Advisory Committee eight present Member States agreed that that the Transaction must be declared compatible with the internal market and the EEA Agreement in accordance with Article 2(2) and 8(2) of the Merger Regulation and Article 57 of the EEA Agreement.

- (19) During the first phase investigation, the Commission sent RFIs to the Parties, their competitors, business customers, retail distributors, trade and customer organisations and so called over the top ("OTT") players. The Commission also conducted interviews with the Parties' wholesale customers and competitors. Finally, the Commission conducted a preliminary quantitative analysis of the price effects of the Transaction.
- (20) During the second phase investigation, the Commission sent RFIs to the Parties' competitors, business customers, wholesale customers and competitors, retail distributors and OTT players. RFIs were also sent to the Parties, including internal documents requests¹³. Further, the Commission performed a customer survey by conducting telephone interviews with 2 500 private retail customers (the "Survey"). The Survey was commissioned in cooperation with the Authority for Consumers and Markets ("ACM") and was carried out by the specialised survey agency Panteia¹⁴. The Survey was aimed at collecting data on private retail customers' switching patterns. That data was used by the Commission as input in a more detailed preliminary quantitative analysis of the price effects of the Transaction, which it undertook during the second phase investigation. The final quantitative analysis of the price effects is presented in Section 8.3.10 and in Annex A to this Decision. On 30 August 2018, the ACM submitted to the Commission a paper setting out its views on the Transaction (the "ACM Position Paper")¹⁵. Finally, the Commission carried out a site visit on a rooftop site operated by TMNL in The Hague where TMNL explained some technical aspects of its planned network upgrades. The ACM also participated in this site visit.

6. THE DUTCH MOBILE TELECOMMUNICATIONS SECTOR

- (21) This Section of the Decision provides an overview of the mobile telecommunications sector in the Netherlands in order to provide context to the assessment undertaken in Sections 7 and 8.

6.1. Key metrics

6.1.1. Data sources

- (22) The ACM acts both as competition authority and as communications regulator in the Netherlands. It collects data on the development of mobile services, fixed telephony, broadband, television and bundles in the Netherlands on the basis of which it prepares key data reports published on a quarter or biannual basis. The ACM Telecommonitor report referred to in this Decision is dated 25 May 2018 and covers the last two quarters of 2017¹⁶.
- (23) Another important source of information and key data about the Dutch mobile telecommunications sector in the Netherlands is offered by Telecom.paper B.V. ("Telecompaper"), an independent research and publishing company focussed on the telecommunications industry. It publishes various reports on the mobile telecoms sector in the Netherlands, including quarterly monitors on

¹³ In this decision, internal documents of the Parties are referenced with indication to their filename in the Parties' submission in reply to RFIs 42 and 43.

¹⁴ See Annex B to the Decision, containing the Survey report.

¹⁵ [ID 2427]

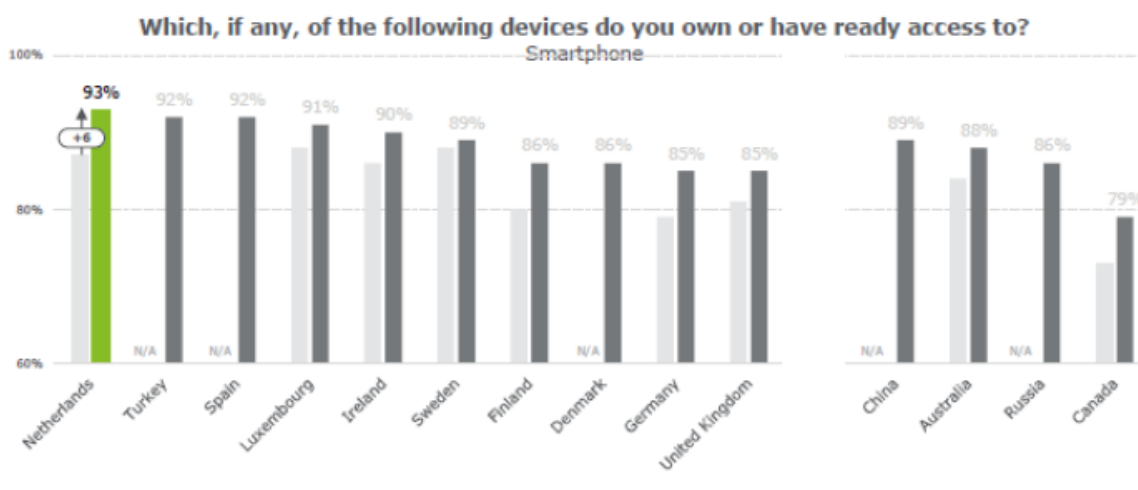
¹⁶ ACM Telecommonitor Q3 – Q4 2017, [ID 2188], also available on the ACM website.

the Dutch mobile network operators ("MNOs") and mobile virtual network operators ("MVNOs")¹⁷. The report used in this Decision on MNOs is dated 13 June 2018 and the report on MVNOs is dated 19 July 2018, both covering the first quarter of 2018¹⁸.

6.1.2. Technological development

- (24) On the basis of the data published by the ACM and Telecompaper as well as other third party reports, the Commission notes that the Dutch telecommunications, and in particular mobile telecommunications, sector is well developed.
- (25) The Netherlands ranked first in Europe in terms of connectivity (fixed and mobile broadband) in the Union's 2017 Digital Economy and Society Index¹⁹. Likewise, a Deloitte study estimates smartphone penetration in the Netherlands in 2017 at 93%, one of the highest rates in Europe, as shown in Figure 1.

Figure 1 - Smartphone penetration in the Netherlands in 2017



Source: Deloitte, Global Mobile Consumer Survey 2017 – The Netherlands, 2017, p. 22, Form CO, page 165.

- (26) The Netherlands is among those countries with the best broadband coverage in the EU. Fixed broadband penetration in the Netherlands is at 94.1% (compared to the Western Europe average of 84%)²⁰. In 2016, 43.8% of the population had subscribed to fast broadband services, the highest figure in the Union²¹. The Netherlands also has a dense WiFi hotspot network, as shown in Figures 2 and 3²².

¹⁷ For an explanation of the differences between these two types of mobile telecommunications services providers see Section 6.3.

¹⁸ Telecompaper report, Dutch Mobile Operators 2018 Q1, Annex 10 to the Article 6(1)(c) Response and Telecompaper report, Dutch Mobile Virtual Network Operators 2018 Q1 [ID 2293].

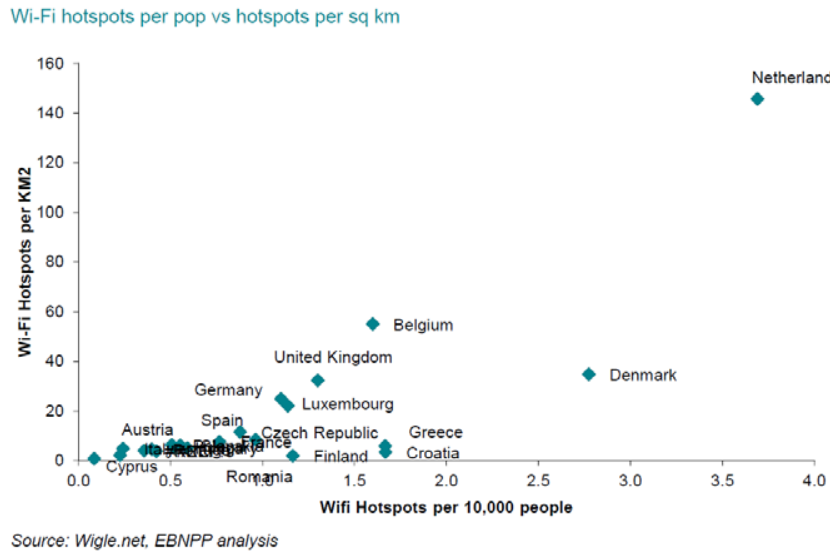
¹⁹ Form CO, paragraph 558.

²⁰ Form CO, paragraph 592.

²¹ Form CO, paragraph 592.

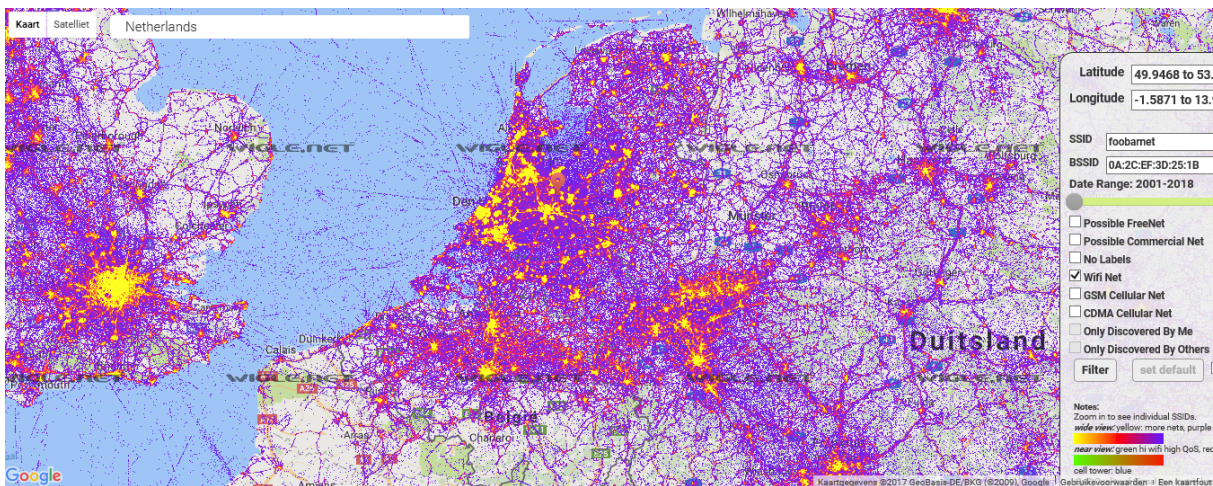
²² Form CO, paragraph 593.

Figure 2 - WiFi hotspots in the Netherlands



Source: Exane BNP Paribas, Unlimited Data – Why? How? So What? What Next?, 16 January 2017, Form CO Annex 5(14)(2)(1), page 22.

Figure 3 - WiFi density in the Netherlands



Source: Wigle.net map (available at: <https://wile.net/>), Form CO, page 169.

- (27) Finally, the Netherlands was one of the first countries that implemented and reached nationwide coverage of 4G networks. The Dutch operators were also among the first to provide Voice Over Long Term Evolution, a first-generation 4G technology ("VoLTE")²³. According to Open Signal²⁴, the Netherlands is among the top performers in terms of average overall network speed²⁵.

6.1.3. Retail mobile telecommunications services in the Netherlands

- (28) Retail mobile telecommunications services consist of the sale of subscriptions to access public mobile telecommunications networks to end customers. Such access allows end users to make voice calls, send and receive text messages

²³ Form CO, paragraph 558.

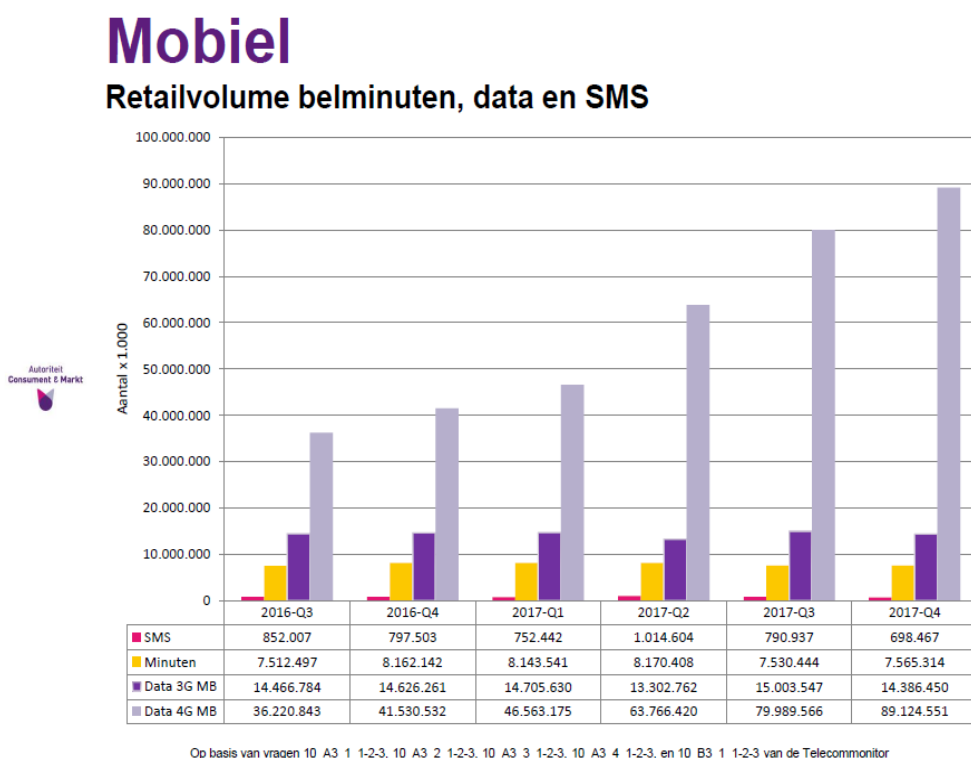
²⁴ Open Signal is a company that specializes in wireless coverage mapping and crowdsources data on carrier signal quality from users who have its consumer mobile application installed.

²⁵ Form CO, paragraph 557.

(SMS) and use mobile data. All these services may be included in a retail mobile subscription, subject to specific tariffs or included in a bundle²⁶.

- (29) In the period 2015-2017, the use of mobile data in the Netherlands substantially increased, while the use of SMS has remained stable. According to the ACM, the total number of voice minutes registered a slight increase from 7 512 497 000 minutes in Q3 2016 to 7 565 314 000 minutes in Q4 2017. Figures on data traffic reveal a clear trend towards higher consumption of data, especially 4G data. Indeed, while the consumption of 3G data has remained almost stable from Q3 2016 to Q4 2017 (with a slight decrease), the traffic of 4G data increased substantially from 36 220 843 000 MB to 89 124 551 000 MB in Q4 2017. Figure 4 illustrates the evolution of the volume of traffic for voice, data and other mobile segments from Q3 2016 until Q4 2017.

Figure 4 – Evolution of the traffic volumes by service (Q3 2016 – Q4 2017)



12

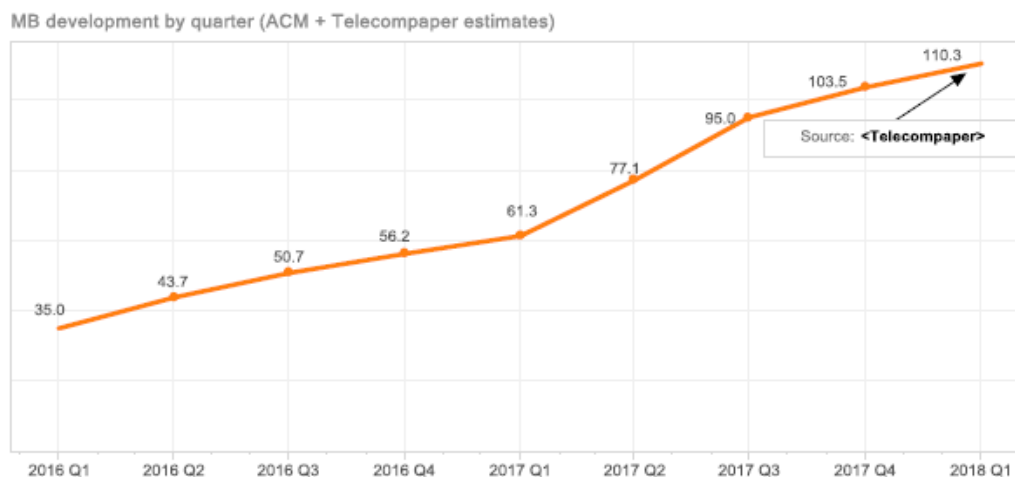
Source: ACM, Telecommonitor Q3-Q4 2017 [ID 2188].

- (30) According to Telecompaper, mobile data traffic in the Netherlands is estimated to have grown in double digits again in Q1 2018, to a total of around 110 petabytes as illustrated in Figure 5. Annual growth is estimated at around 80%²⁷.

²⁶ End users can use their subscriptions for telecommunications within the Member State where their provider is authorised to provide mobile telecommunications services. End users can also use their subscriptions for telecommunications when abroad, by "roaming" on the network of another mobile operator. Finally, end users can use their subscriptions for international telecommunications, for example to call abroad.

²⁷ Telecompaper, Dutch Mobile Operators Q1 2018, slide 10, Annex 10 to the Article 6(1)(c) Response .

Figure 5 - Mobile data usage in the Netherlands



Source: Telecompaper report, Dutch Mobile Operators Q1 2018, slide 10, Annex 10 to the Article 6(1)(c) Response.

- (31) Data usage may in part be stimulated by operators offering increasing data allowances with little changes in monthly prices. Over 41% of all Dutch mobile users had a data bundle of more than 1.5 GB and 13% had more than 10 GB (including unlimited bundles) in Q1 2018, while 6% of all mobile users now have unlimited data bundles²⁸. Dutch consumers expect their next mobile data bundle to be slightly bigger, at an average 4.4 GB per month versus 4.1 GB in 2018, according to the latest research from Telecompaper²⁹.
- (32) With smartphones nearly ubiquitous, the trend perceived in the industry is that, as these devices are upgraded to faster 4G speeds, data usage will further increase. As of February 2018 around 65% of the population already used 4G services compared to 59% in September 2017³⁰.
- (33) In this context, data appears to be the main focus of competition in the provision of retail mobile telecommunications services in the Netherlands³¹.
- (34) In terms of revenues, according to ACM, as of Q4 2017, MNOs' revenues from data amounted to EUR 284 652 million, while revenues from voice services and revenues from SMS were equal to EUR 224 150 million and EUR 22 751 million respectively. Figure 6 shows the evolution of revenues from voice, SMS, data and other sources from Q3 2016 until Q4 2017.

²⁸ Telecompaper, Dutch Mobile Operators Q1 2018, slide 9, citing TP Consumer Insights, Annex 10 to the Article 6(1)(c) Response .

²⁹ Telecompaper, Dutch Mobile Operators Q1 2018, slide 9, citing TP Consumer Insights, Annex 10 to the Article 6(1)(c) Response .

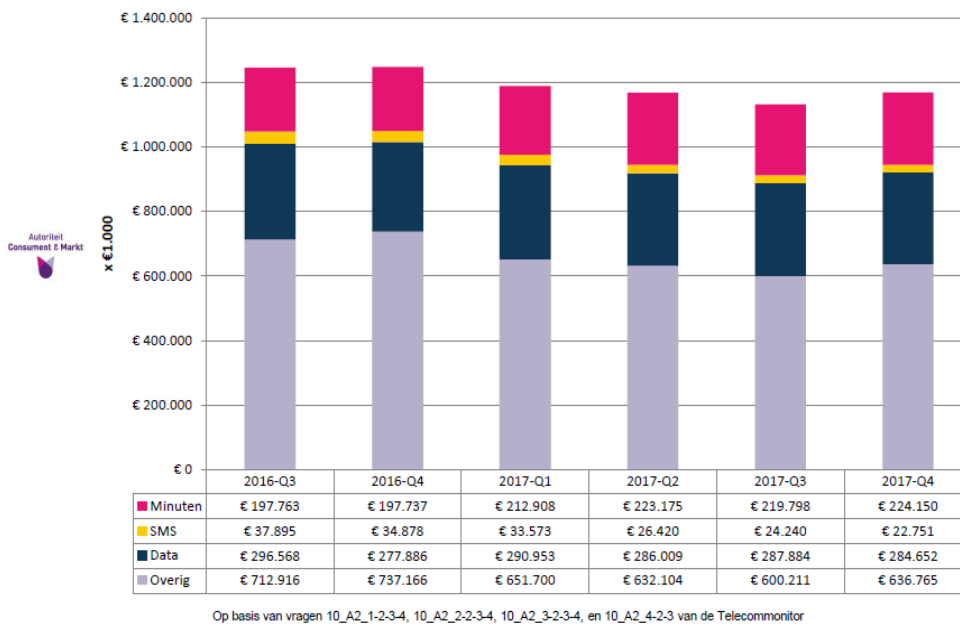
³⁰ Telecompaper, Dutch Mobile Operators Q1 2018, slide 35, Annex 10 to the Article 6(1)(c) Response .

³¹ Telecompaper, Analysis of Mobile Tariffs 2016-2018-May, slide 9 [ID 2298].

Figure 6 - Evolution of revenues by mobile telecommunications service (Q3 2016 – Q4 2017)

Mobiel

Retailomzet Mobiele Network Operators (MNO's)

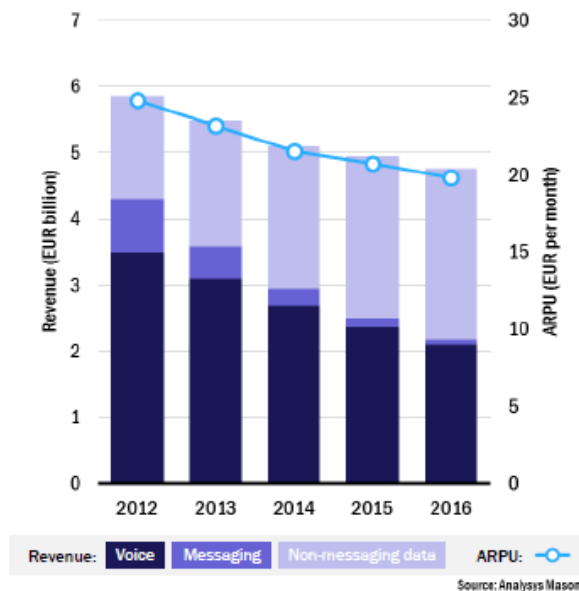


11

Source: ACM, Telecommonitor Q3 - Q4 2017 [ID 2188].

- (35) The revenues from mobile services provided in the Netherlands have progressively decreased in the period 2012-2016, as illustrated in Figure 7.

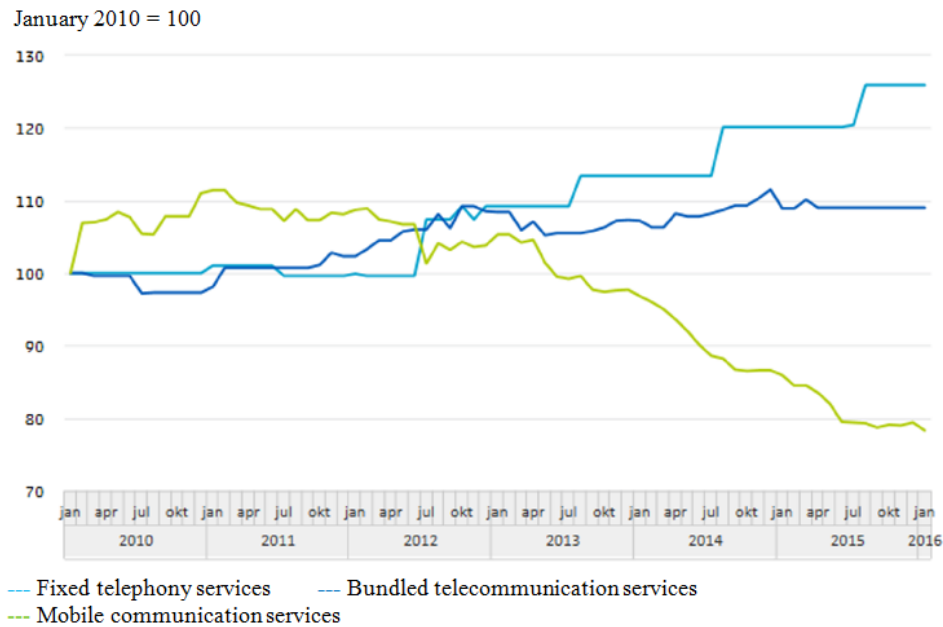
Figure 7 - Mobile services revenues in the Netherlands 2012 – 2016



Source: Analysys Mason, Netherlands Telecoms Market Report 2017, 23 August 2017, p. 15 (Form CO, page 160).

- (36) For the year ending 31 March 2018, Telecompaper reported an overall decline of 7% in the mobile service revenues of the four Dutch MNOs³². The ACM has also observed a decreasing trend in prices for mobile services as shown in Figure 8.

Figure 8 - Decrease in mobile service prices in the Netherlands (2010 – 2016)

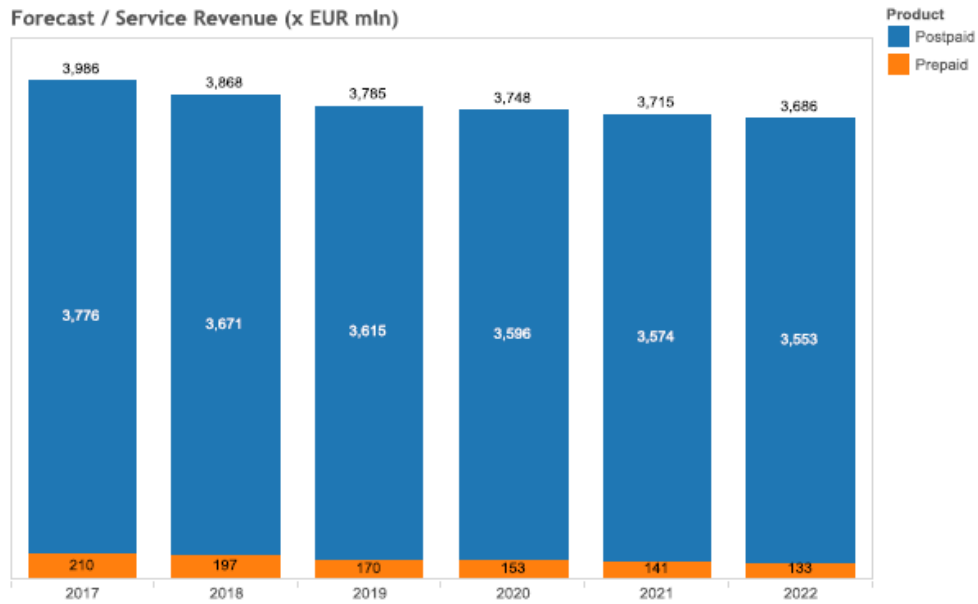


Source: ACM report, Advice multi-band auction 2019, 10 October 2017, p. 27, Form CO, page 188.

- (37) Telecompaper also projects a continuous decrease of mobile services revenues in the Netherlands until 2022 as shown in Figure 9.

³² Telecompaper, Dutch Mobile Operators Q1 2018, slide 5, Annex 10 to the Article 6(1)(c) Response .

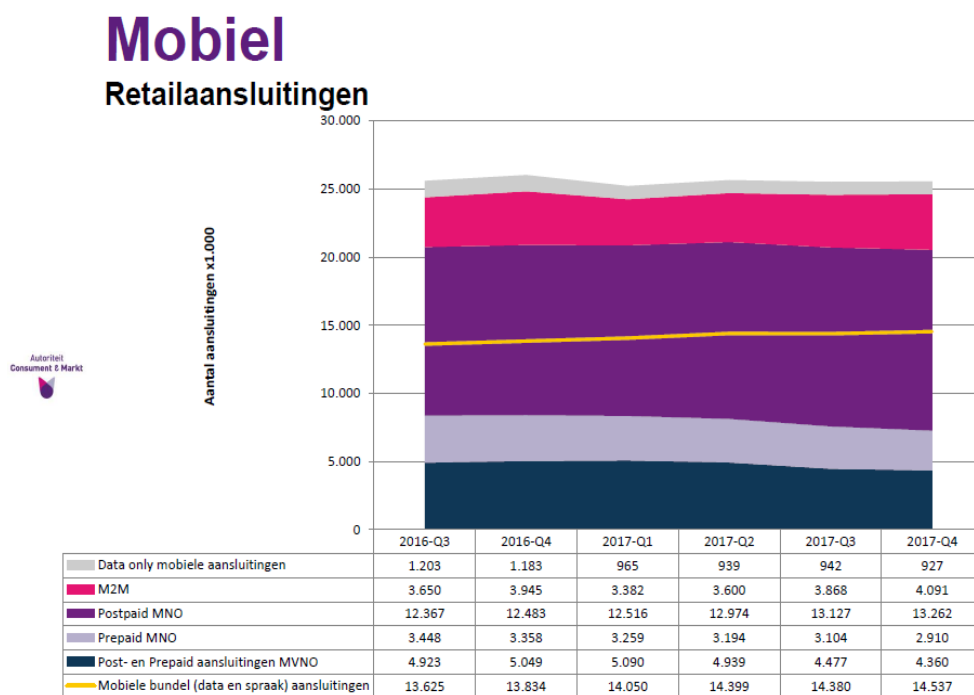
Figure 9 - Forecast mobile services revenues in the Netherlands 2017-2022



Source: Telecompaper, Dutch Mobile Operators 2018 Q1, slide 30, Annex 10 to the Article 6(1)(c) Response.

- (38) Mobile telecommunications subscriptions can be postpaid or prepaid. Postpaid subscriptions are those charged after the services are used, whilst prepaid subscriptions are those for which the payment is collected by the provider before the service is used. The distinction between prepaid and postpaid services in the Netherlands is blurred. Certain features generally associated with prepaid contracts often also apply to postpaid contracts and vice-versa. Some operators (for example, Tele2 NL, Ben – the budget brand of TMNL, and Simyo – a budget brand of KPN B.V. ("KPN")), offer postpaid subscriptions that are not subject to any 'lock-in' binding period. In addition, some prepaid users are often automatically and directly charged for automatic 'top-ups' on their credit card or bank account.
- (39) According to the ACM, as of Q4 2017, in the Netherlands there were 13 262 000 postpaid MNO customers, compared to only 2 910 000 prepaid MNO customers. Figure 10 illustrates the evolution in the number of prepaid and postpaid mobile connections in the Netherlands in the period between Q3 2016 and Q4 2017, indicating that the number of postpaid customers has been slightly increasing over this period, while the number of prepaid customers has decreased.

Figure 10 - Evolution in the number of prepaid and postpaid connections



Op basis van vragen 10_A1_1_1-2-3-4, 10_A1_2_1-2-3-4, 10_A1_3_1-2-3-4, 10_A1_4_1 en 10_B3_1_1-2-3 van de Telecommonitor

9

Source: ACM, Telecommonitor Q3-Q4 2017 [ID 2188].

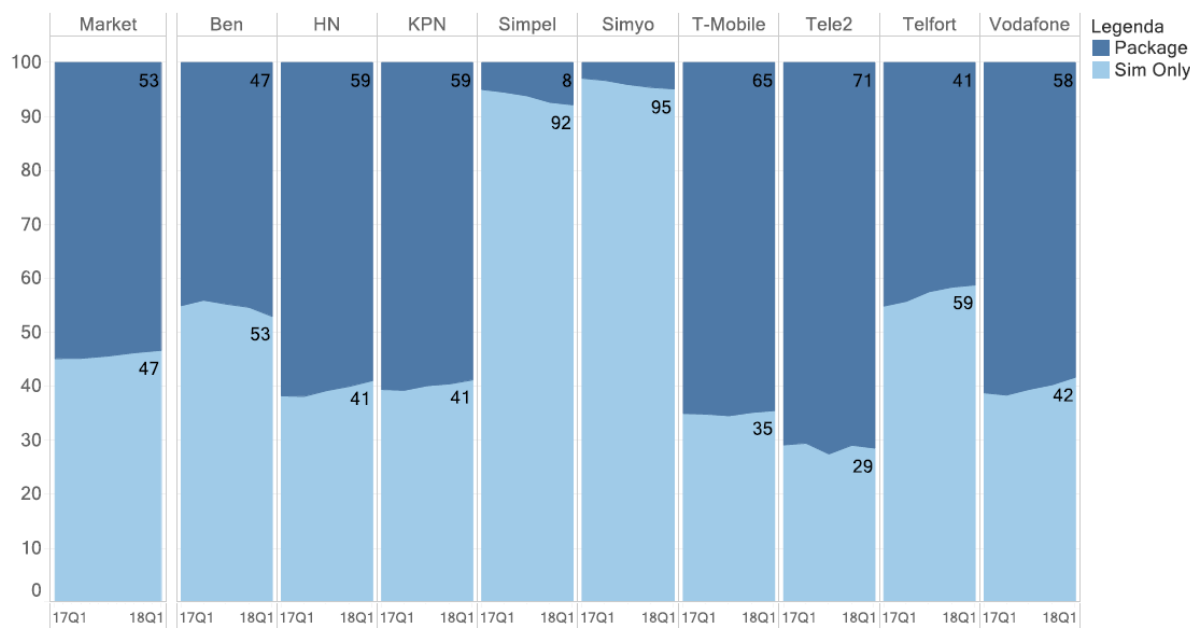
- (40) In terms of revenues, in the Netherlands the postpaid subscriptions generated EUR 4 295,0 million revenues in 2017 and the prepaid subscriptions generated EUR 230,0 million revenues in the same timeframe³³.
- (41) Finally, in the Netherlands, mobile services are either offered as SIM-only services (or "SIMO") or in combination with a handset. However, the sales of handset subscriptions are declining, as shown in Figure 11.

³³

Telecompaper, Dutch Mobile Operators 2017 Q4. slide 6, Answer to RFI 42 [Filename: TMNL-EC-245991].

Figure 11 - Evolution in the number of SIMO and handset subscriptions (Q1 2017 – Q1 2018)

The share of subscriptions with handsets in the market stabilised over the past year, at just over 53%. Hollandsnieuwe, KPN, Telfort and Vodafone have increased their shares of SIM-only.



* Simyo packages are being sold at independent webshops
Telecompaper copyright 2018

10

Source: Telecompaper, Postpaid Mobile Insight, 2018 Q1, slide 10, [ID 842; Filename: Postpaid Mobile Insight-2018Q1.pdf], submitted in response to RFI 38 by the Notifying Party.

- (42) One cause for this decline is a ruling by the Dutch Supreme Court on 13 June 2014 clarifying the interpretation of the Dutch Civil Code and the Dutch Financial Supervision Act ("WFT") and setting up a number of requirements that need to be met for a handset subscription to be sold³⁴. In particular, a handset that is provided as part of a mobile subscription is qualified as a hire-purchase agreement (koop op afbetaling) and the provision of consumer credit (consumentenkrediet). To ensure that the sale of the handset is valid and to avoid a complicated procedure of compensation payments between the company and the customer, the company: (i) has to assign a price to the handset that is in line with commercial reality; (ii) obtain a licence to provide consumer credit; and (iii) perform a credit check on the customer. This regulation has been in place since January 2017³⁵.

6.1.4. Retail customer groups

- (43) The Dutch mobile customer base (excluding machine-to-machine "M2M"³⁶) is estimated at 20.5 million on 31 March 2018, corresponding to an increase of

³⁴ Telecompaper, Dutch Mobile Operators 2017 Q4. slide 14 provided with TMNL internal documents [Filename: TMNL-EC-245991].

³⁵ Form CO, paragraph 146.

³⁶ M2M subscriptions allow machines, devices, appliances, etc. to connect wirelessly to the internet, permitting the transmission and receipt of data to a central server. Common examples of M2M include energy metering or a burglar alarm. Intelligent traffic lights, for instance, may rely on M2M services to communicate with each other to adjust their circuits.

mobile customers by 0.8% with respect to the year before³⁷. Mobile penetration has also increased in the Netherlands and was 119.0% at the end of Q1 2018³⁸.

- (44) There are two main types of retail mobile customers: (i) private or residential customers, to which operators offer prepaid, and postpaid subscriptions; and (ii) business customers, to which operators offer postpaid subscriptions. In 2017, the revenues generated from sales of subscriptions to private and business customers amounted to EUR 2 339,8 million and EUR 1 055,5 million, respectively³⁹. In terms of subscribers, at the end of 2017 there were 16 063 200 private customers and 4 423 600 business customers⁴⁰.

6.2. Customer switching

- (45) An important element of a healthy retail mobile market is the ability of consumers to choose between competing providers and to switch between providers quickly and easily.
- (46) Under the Dutch Telecommunications Act, the maximum duration for consumer contracts is 24 months⁴¹.
- (47) When switching, consumers have the right to keep their mobile telephone number. The facility that enables consumers to keep their mobile telephone number whilst switching provider is a centralised mobile number portability ("MNP") system, which all operators must use to process mobile number porting requests. The MNP system was introduced in the Netherlands in 1999 and is operated by COIN⁴².
- (48) Overall, COIN estimates that over 85% of postpaid customers switching their mobile service provider retain their number⁴³.

6.3. Mobile telecommunications service providers in the Netherlands

- (49) There are four MNOs active in the Netherlands: KPN, VodafoneZiggo, TMNL and Tele2 NL. In addition to these MNOs, other companies offer mobile services in the Netherlands based on wholesale access to the networks of the MNOs, including mobile virtual network operators ("MVNOs") and branded resellers. The MNOs active in the Dutch market are described in Section 6.3.1. and the non-MNOs are described in Section 6.3.2.

6.3.1. MNOs

- (50) Two essential inputs are necessary in order to be active as an MNO: (i) the authorisation to use spectrum band(s) for mobile telecommunications; and (ii) a physical mobile network⁴⁴. The MNOs' spectrum holdings are described in

³⁷ Telecompaper, Dutch Mobile Operators Q1 2018, slide 5, Annex 10 to the Article 6(1)(c) Response.

³⁸ Telecompaper, Dutch Mobile Operators Q1 2018, slide 5, Annex 10 to the Article 6(1)(c) Response.

³⁹ See Form CO, Table 22 and Table 25.

⁴⁰ Annex to Notifying Party's Response to RFI 64 of 21 July 2018.

⁴¹ Form CO, footnote 96.

⁴² COIN is a private non-profit association funded by telecommunications operators active on the Dutch market. It operates the Central Reference Database which enables fast porting with all telecommunications operators in the Netherlands.

⁴³ See minutes of call with COIN dated 6 April 2018 [ID 934].

⁴⁴ A mobile network is composed of a number of mobile sites, essentially a mast with an antenna and a radio-frequency system, linked to a core network by backhaul connections. Each mobile site covers a limited area and has a maximum capacity.

Section 6.3.1.5, while their network infrastructure and network infrastructure arrangements are described in Section 6.3.1.6.

6.3.1.1. KPN

- (51) KPN is the former incumbent Dutch fixed line operator. It was originally a public monopoly providing first generation mobile services; the process of privatisation began in 1998. KPN is headquartered in the Netherlands and is listed on the Euronext Amsterdam stock exchange. KPN's largest shareholder is América Móvil, the Mexican multinational telecommunications company, which holds a 21.1% stake. Several investment funds, including BlackRock, Franklin Templeton and Discovery Capital, also own shareholdings. In 2017, KPN generated worldwide revenue of EUR 6 498 million, of which EUR 5 876 million was achieved in the Netherlands⁴⁵.
- (52) KPN is the largest provider of fixed and mobile telephony, internet broadband services and television in the Netherlands. In Q4 2017, KPN had approximately 5.96 million postpaid and 3.94 million prepaid SIMs and approximately 2.24 million broadband customers⁴⁶.
- (53) KPN owns a 2G, 3G and 4G mobile network with nationwide coverage and offers mobile telephony under its main brand "KPN" as well as two sub-brands: "Telfort" and "Simyo". Telfort was established in 1996 and was acquired by KPN in 2006. Telfort is KPN's no-frills brand and offers customers mobile and fixed telephony, broadband, television and multi-play services. Simyo was established in 2005 as a KPN brand. It is a SIM only brand sold exclusively via the internet. KPN has recently acquired a number of MVNOs, hosting and cloud services providers.
- (54) In the business segment, VodafoneZiggo offers both mobile and fixed communications services as well as hosted telephony services and integrated workspace and communication services to business customers in the Netherlands in partnership with another company. The Vodafone Global Enterprise unit offer telecommunications services to multinational companies. VodafoneZiggo also provides M2M services in the Dutch market and announced the launch of NB-IoT services in 2017.
- (55) KPN is the largest provider of wholesale mobile and fixed access services. It has the highest number of wholesale mobile customers and hosts three of the largest independent MVNOs: Lebara, Lycamobile and AH Mobiel.

6.3.1.2. VodafoneZiggo

- (56) VodafoneZiggo was formed on 31 December 2016 when Vodafone Group plc ("Vodafone") and Liberty Global plc ("Liberty Global") contributed their respective mobile and cable operations in the Netherlands to the VodafoneZiggo joint venture. VodafoneZiggo's shareholders, Vodafone and Liberty Global, each own 50% of the shares in the joint venture.

⁴⁵ See KPN 2017 Annual Report, page 88 available at https://annualreport2017.kpn/app/uploads/KPN_IR-2017_Single_navigation.pdf.

⁴⁶ Telecompaper, Dutch Mobile Operators 2017 Q4, slide 20 provided with TMNL internal documents [Filename: TMNL-EC-245991]; Telecompaper, Dutch Broadband 2017 Q4, slide 11 provided with TMNL internal documents [Filename: TMNL-EC-107828].

VodafoneZiggo's consolidated revenue for the twelve months ending 31 December 2017 amounted to EUR 4 019 million⁴⁷.

- (57) VodafoneZiggo owns a 2G, 3G and 4G mobile network with nationwide coverage. VodafoneZiggo is the second biggest MNO in the Dutch market in terms of mobile service revenues and mobile subscribers. In Q4 2017, VodafoneZiggo had approximately 4.08 million of postpaid and 923 000 of prepaid SIMs. In the same period, VodafoneZiggo reported approximately 3.24 million broadband customers⁴⁸.
- (58) VodafoneZiggo provides television, broadband internet, fixed-line telephony and mobile services to residential and business customers in the Netherlands. The main brand focuses on convergence and premium services. In addition, VodafoneZiggo uses the second brand 'Hollandsnieuwe', which operates as an MVNO. Hollandsnieuwe was launched by Vodafone in 2011. Hollandsnieuwe subscriptions are currently only available online.
- (59) In the business segment, VodafoneZiggo offers both mobile and fixed communications services as well as hosted telephony services and integrated workspace and communication services to business customers in the Netherlands in partnership with another company. The Vodafone Global Enterprise unit offers telecommunications services to multinational companies. VodafoneZiggo also provides M2M services in the Dutch market and announced the launch of NB-IoT services in 2017.
- (60) VodafoneZiggo offers wholesale mobile access services and hosts five MVNOs, including Telesur and Deka Mobiel.

6.3.1.3. TMNL

- (61) TMNL provides telecommunications services to private and business customers as well as a number of wholesale mobile access services in the Netherlands.
- (62) TMNL has been active on the Dutch retail mobile market for a number of years and it owns a 2G, 3G and 4G mobile network with nationwide coverage. TMNL is present in the market for retail mobile telecommunication services through the T-Mobile brand as well as the low-cost no-frills brand Ben.
- (63) Since its acquisition of Vodafone's Dutch fixed-line business in December 2016, which Vodafone divested to TMNL in implementation of the commitments offered to gain the Commission's approval for the creation of VodafoneZiggo⁴⁹, TMNL also provides fixed telecommunications services based on wholesale fixed access services purchased from KPN.
- (64) TMNL is also present in the wholesale market for access and call origination on mobile networks⁵⁰. TMNL provides wholesale access to Simpel and to a

⁴⁷ VodafoneZiggo 2017 Annual Report, page 91, available at <https://www.vodafoneziggo.nl/291/jaarverslagen>.

⁴⁸ Telecompaper, Dutch Mobile Operators 2018 Q4, page 20 provided with TMNL internal documents [Filename: TMNL-EC-245991]; Telecompaper, Dutch Broadband 2017 Q4, page 11 provided with TMNL internal documents [Filename: TMNL-EC-107828].

⁴⁹ See Commission decision of 3 August 2016 in case M.7978 – *Vodafone/LibertyGlobal/Dutch JV*.

⁵⁰ See Form CO, paragraph 509.

number of smaller wholesale customers. TMNL serves MVNOs directly or through Mobile Virtual Network Enablers ("MVNEs")⁵¹ [...].

- (65) In 2017, TMNL generated revenue of EUR 1 341.4 million; all of which was achieved in the Netherlands. At the end of Q4 2017, TMNL had approximately 3.84 million postpaid mobile telecommunications customers, 522 000 prepaid mobile SIMs and approximately 191 000 broadband customers⁵².

6.3.1.4. Tele2 NL

- (66) Tele2 NL offers mobile and fixed telecommunications services to private and business customers in the Netherlands. Tele2 NL is part of the Swedish group Tele2 Tele2 AB which was founded in 1986. In addition to the Netherlands, Tele2 AB is also active in Croatia, Estonia, Latvia, Lithuania, Kazakhstan and Sweden.
- (67) Tele2 NL started offering mobile telecommunications services in the Netherlands in 2001 as the first MVNO. In 2010 and 2012, Tele2 NL acquired spectrum and in November 2015 launched services as a 4G-only MNO relying on TMNL's infrastructure pursuant to a network sharing agreement and obtains 2G and 3G coverage from the TMNL network roaming agreement. Tele2 NL traditionally positioned itself as a low-cost provider but has targeted more high value customers since the launch of its 4G network.
- (68) Since the early 2000s, Tele2 NL has offered fixed services to business customers in the Netherlands. Tele2 NL fixed assets comprise fibre, fibre connections to business-to-business ("B2B") locations and data centres.
- (69) Tele2 NL has limited activities in the provision of wholesale mobile access services. The activities of Tele2 NL on the wholesale market are fairly limited. Tele2 NL has [...].
- (70) In 2017, Tele2 NL generated worldwide revenue of EUR 619.1 million. In Q4 2017, Tele2 NL had approximately 1.15 million of postpaid and 86 000 of prepaid SIMs and had approximately 301 000 broadband customers⁵³.

6.3.1.5. Spectrum holdings by the MNOs

- (71) Table 1 provides an overview of the current frequency holdings of the four MNOs in the Netherlands.

⁵¹ The Notifying Party explains in the Form CO (paragraph 515) that MNOs also provide wholesale access to MVNEs and to Mobile Virtual Network Aggregators ("MVNAs"). MVNEs and MVNAs act as intermediaries between MVNOs and MNOs and do not compete on the mobile retail market. MVNEs provide wholesale access, together with other services, such as traffic clearing, billing, and customer support to MVNOs, in particular to smaller MVNOs.

⁵² Telecompaper, Dutch Mobile Operators 2018 Q4, page 20, Answer to RFI 42 [Filename:TMNL-EC-245991]; Telecompaper, Dutch Broadband 2017 Q4, page 11, Answer to RFI 42 [Filename: TMNL-EC-107828].

⁵³ Telecompaper, Dutch Mobile Operators 2018 Q4, page 20, Answer to RFI 42 [Filename: TMNL-EC-245991]; Telecompaper, Dutch Broadband 2017 Q4, page 11, Answer to RFI 42 [Filename: TMNL-EC-107828].

Table 1 - Spectrum holdings of the four MNOs active in the Netherlands

	800 MHz FDD⁵⁴	900 MHz FDD	1800 MHz FDD	2100 MHz FDD	2600 MHz FDD	2600 MHz TDD⁵⁵
TMNL	-	2x15	2x30	2x20	2x5	20
Tele2 NL	2x10	-	-	-	2x20	-
KPN	2x10	2x10	2x20	2x20	2x10	20
VodafoneZiggo	2x10	2x10	2x20	2x20	2x30	-

Source: Form CO; Annex 7(2), Table 1.

- (72) The current spectrum allocation reflects the outcome of a series of auctions, the most recent of which was held in 2012. The next auction is scheduled for 2019 and the Notifying Party anticipates that a further auction will be held in 2023.
- (73) In the 2019 auction, spectrum in the 700, 1400 and 2100 MHz bands will be auctioned⁵⁶. In the auction which is anticipated to take place in 2023 (for roll out in 2025), spectrum in the 3,500 MHz will be offered⁵⁷.

6.3.1.6. Mobile telecommunications infrastructure

- (74) A mobile network includes a large number of radio base station sites. Each of them has a mast on which there are antennas as well as a base transceiver station system. The antennas and transceiver station equipment are the main elements of the radio access network ("RAN") equipment. This equipment transmits and receives voice and data signals between the masts and subscribers' devices. Radio base station sites are either linked to their respective controller nodes (for 2G and 3G) or directly to the core network (for 4G) via a backhaul transmission connection⁵⁸, which consist of copper, microwave or fibre links. To ensure sufficient capacity in the connection between the mobile site and the core network, mobile networks are increasingly making use of fibre backhaul.
- (75) MNOs can roll out their network by themselves, independently from other MNOs, or together with other MNOs through a network sharing agreement.

A. *Site construction*

- (76) When an MNO rolls out its network by itself it needs to build sites on which it then installs the necessary infrastructure.

⁵⁴ Frequency Division Duplex ("FDD") is a duplexing scheme used in fixed broadband wireless networks. This scheme supports two-way radio communication by using two distinct radio channels.

⁵⁵ Time Division Duplex ("TDD") is also a duplexing scheme used in fixed broadband wireless networks which, however, uses a single frequency to transmit signals in both the downstream and upstream directions.

⁵⁶ See ACM, "*Advies Multibandveiling 2019*", 10 October 2017, paragraph 1, Form CO Annex 5(14)(4)(2), available at <https://www.acm.nl/nl/publicaties/conceptadvies-multibandveiling-2019>.

⁵⁷ See Form CO, paragraph 539.

⁵⁸ Mobile backhaul provides connectivity between the radio access network and the mobile core network and is supplied using several media (for example fibre and microwaves) and technologies (for example time division multiplexing ("TDM") and Ethernet).

- (77) Under the applicable Dutch legislation, in certain circumstances, the installation of antennas requires an integrated physical environment permit (omgevingsvergunning) from the municipality⁵⁹. Such cases are, for example, the installation of a free-standing transmission mast, antennas over 5 metres high (including base), and for installation on monuments, listed buildings, or in a village or urban conservation area.
- (78) When an integrated physical environment permit is needed, the main steps of the authorisation process are the following. Usually before an official request is issued, a mobile operator has already spoken with the municipality about the preferred location; when a mobile operator applies for an integrated physical environment permit, the municipality first verifies whether the antenna complies with spatial planning rules. If this is not the case, national legislation provides municipalities with the ability to make an exception in local legislation to allow for a free-standing transmission mast up to than 40 metres. According to the ACM, integrated physical environment permits are generally issued within two months. The duration of the procedure also depends on the number of objections raised by residents and can be prolonged when mobile operator and municipality both agree on postponing a decision⁶⁰.
- (79) In addition, municipalities can apply environmental restrictions in general environmental plans about where free-standing transmission masts are preferred. The explicit approval of municipalities to install an antenna is only required in certain exceptional circumstances (in case of so called Natura2000 areas⁶¹).
- (80) A recent study by the research agency Kwink commissioned by the Dutch Ministry of Economic Affairs and Climate Policy showed that 6,6% of the municipalities have their own antenna policy⁶². These policies add additional legislation to the national legislation. Kwink found that both municipalities with and without an antenna policy more or less follow the same principles for locations where the installation of antennas is preferred or discouraged.
- (81) For antennas lower than 5 metres, an integrated physical environment permit is usually not required, but the antenna agreement ("Antenneconvenant"⁶³) does apply for an orderly installation, which encourages cooperation and information exchange between mobile operators and municipalities. One of the regulations in the Antenna Agreement is meant to prevent the so called proliferation of free-standing transmission masts: mobile operators should first look for sites on rooftops.
- (82) In order for antennas to be permit-free, the antennas have to be lower than 5 metres and can be placed on rooftops at a height of minimum 9 metres, provided that the whole antenna-installation is not higher than 5 metres. On a

⁵⁹ ACM submission on sites [ID 2229].

⁶⁰ ACM submission on sites [ID 2229].

⁶¹ Natura 2000 is a network of nature protection areas in the territory of the European Union.

⁶² Ministry of Economic Affairs and Climate Policy, Connectivity Action Plan, 2018, pp. 20-25, available at <https://www.government.nl/documents/reports/2018/07/13/connectivity-action-plan> [ID 2190].

⁶³ The Antenna Agreement is a legally binding agreement dated 28 September 2010 between the Dutch government, the mobile operators in the Netherlands and the union of Dutch municipalities ("VNG"), which deals with the installation of antennas for which no environmental permit is required, available at <https://www.antennebureau.nl/documenten/convenanten/2018/januari/26/antenneconvenant-2010> [ID 2191].

light pole or other element alongside the road the antenna has to be placed at least at 3 metres above ground level. In other cases an integrated physical environment permit is necessary from local government.

- (83) When a permit is not necessary, the Antenna Agreement includes the obligation for operators to inform municipalities on a yearly basis with insight into the antennas to be installed by mobile operators (as well as the installed antennas) in their municipalities. Operators are required to take the advice of municipalities into account as much as possible.
- (84) Different procedures then apply depending on the ownership of the building on which the antenna has to be installed⁶⁴. The rules are the same regardless of the location of whether the antennas are placed in rural areas or urban areas.
- (85) Other important rules relevant for the mobile site construction are the standards for electromagnetic fields ("EMF") laid down in the Dutch Telecommunications Act ("Telecommunicatiewet").
- (86) Often municipalities and residents demand information as part of the procedure (about health, legislation, technics) from the Antenna Office, the national information agency of the Dutch government concerning antennas.
- (87) The ACM observed that, in some cities, an increasing number of large housing corporations no longer approve mobile operators to build antennas on top of their buildings, mainly due to complaints and resistance of residents⁶⁵. Mobile operators comment that they have more difficulties finding suitable sites because of this. Nonetheless, the ACM stated that, whilst fact that some housing corporations are less willing to lease their rooftops to MNOs can be a hurdle on a local level, not every major city has this problem⁶⁶.
- (88) Regarding monuments, in general antennas can be placed on monuments in any city but only after a permit has been issued which sets out specific (building) requirements. Requirements regarding the external appearance of the buildings also can have restrictive effect on the placement of antennas. Moreover, some municipalities have stronger restrictions for placing antennas on monuments than the national legislator provides, such as Amsterdam. The ACM reports that rules in Amsterdam have sometimes been considered restrictive in certain areas, especially in the city centre⁶⁷.
- (89) Greater reticence by housing corporations and restrictive local legislation could make it somewhat more difficult to build up a dense network in urban areas.

⁶⁴ In case of multiple ownership within a building, the owners have to agree on constructing an antenna on their roof. The building residents have joined in an owners association and come together to discuss the placement of the antenna on the roof and will then vote on this. Depending on their arrangements, a particular part of the group should vote in favour of the arrival of the antenna to let the mobile operator place their antenna on the rooftop.

Another relevant agreement in the Antenna Agreement is that when the building is inhabited by people who rent an apartment -and the landlord approves the construction of the site- the building residents are presented a procedure in which they can vote pro or against the antenna on top of their building. An absolute majority of the number of addresses has to vote against the antenna to prevent the mobile operators from building their antenna on the rooftop. This procedure itself takes at least four weeks (20 business days) and is issued by an independent administration office. The complete procedure takes time, from a couple of weeks to several months.

⁶⁵ ACM submission on mobile network sites [ID 2229].

⁶⁶ ACM's follow up reply to request on mobile network sites [ID 2230].

⁶⁷ ACM's follow up reply to request on mobile network sites [ID 2230].

Nonetheless, according to the ACM, despite these issues, the different MNO networks have been expanded in city centres in order to deploy 4G-networks. There are four 4G-networks with high nationwide coverage; therefore, according to the ACM the exact impact of these issues is debatable⁶⁸.

- (90) Further, the Commission notes that to tackle the mentioned local issues several actions and policy objectives are formulated in the Connectivity Action Plan published by the Ministry of Economic Affairs and Climate Policy⁶⁹.





B. *Network sharing*

- (91) In a network sharing agreement, MNOs agree to share some of the network elements in order to reduce costs and improve coverage and capacity. The degree of integration within network sharing agreements varies depending on whether: (i) the MNOs only share their site infrastructure ("passive sharing" or "site sharing"); (ii) they also share the RAN equipment at the sites ("active sharing"); (iii) they also share their spectrum ("spectrum sharing"); or (iv) they also rely on the same core network ("full network sharing").
- (92) In particular, passive sharing involves sharing basic infrastructure, such as masts, cabins and sometimes antennas and power supplies ("passive infrastructure"), as well as the cost of the site itself (rent and rates). In passive sharing, each operator has its own RAN equipment, which is built at the same site and fed into a shared antenna setup.
- (93) Active sharing involves also sharing the RAN equipment ("active equipment"), meaning the base transceiver station and the controller nodes (for 2G and 3G), or the base transceiver station (for 4G) in addition to the passive infrastructure. There are two main models of active RAN sharing agreements:
- Active RAN sharing on independent carriers (MORAN): one common RAN platform is used for both operators. However, the traffic of each operator is handled on each operator's own independent radio carriers representing each operator's independent spectrum with independent parameters and feature sets.
 - Active RAN sharing on shared carriers (MOCN): one RAN platform is used for both operators. The equipment is shared and the spectrum resources are pooled. This means there will be common parameters and a common RAN-related feature set, and potentially fewer carriers will need to be deployed due to the pooling effect.
- (94) Transmission (backhaul to the MNOs' core networks) may also be shared under passive or active sharing agreements. It is also possible for MNOs to integrate further and share spectrum.
- (95) Figure 12 provides an overview of the different forms of network sharing.

⁶⁸ ACM's follow up reply to request on mobile network sites [ID 2230].

⁶⁹ Ministry of Economic Affairs and Climate Policy, Connectivity Action Plan, 2018, available at <https://www.government.nl/documents/reports/2018/07/13/connectivity-action-plan>, pages 23-25 [ID 2190].

Figure 12 - Extent of sharing under different forms of network sharing

	No sharing	Passive sharing	Active sharing	Spectrum sharing / roaming	Full network sharing (JV/merger)
 Mobile site		■	■	■	■
 Base station			■	■	■
 Frequency band				■	■
 Core network					■

Source: Commission’s compilation.

- (96) Network sharing can provide substantial CAPEX⁷⁰ and OPEX⁷¹ cost savings in achieving a certain level of coverage and capacity, and also can make it economically viable to extend coverage to less densely populated rural areas. By reducing costs and improving returns on capital, network sharing also allows for further network investments that might not otherwise be undertaken. Network sharing can also speed up network deployment, as the human resources required are shared between two MNOs.
- (97) More specifically, passive sharing allows for a substantial decrease in the costs of building, operating and maintaining passive assets for each of the MNOs. Sharing sites reduces the overall number of sites required, allowing for significant OPEX cost savings on rent, rates, power and maintenance, in addition to reducing the CAPEX in acquiring and developing sites and masts.
- (98) Active sharing gives rise to further CAPEX cost savings associated with the roll out of a piece of RAN equipment for multiple operators⁷², as well as OPEX savings from maintaining less RAN equipment in total.

6.3.1.7. Agreements between the MNOs

- (99) The Parties entered into a passive network sharing agreement (the "NSA") on 13 August 2013. The agreement entered into by the Parties was a passive antenna sharing and it is still in force.
- (100) [Description of NSA negotiations between the Parties]
- (101) [Description of NSA’s key terms]
- (102) [Description of the discussions between the Parties on the future of the NSA]

⁷⁰ Capital expenditures are funds used by a company to acquire or upgrade physical assets such as property, industrial buildings or equipment. It is often used to undertake new projects or investments by the company.

⁷¹ Operating Expense is a category of expenditure that a company incurs as a result of performing its normal business operations.

⁷² The cost of a piece of RAN equipment for a single operator is more than half the cost of a multiple operator RAN equipment ("MORAN").

- (103) On 13 August 2013 the Parties also entered into a national roaming agreement ("NRA") which, subject to various amendments, remains in force. The NRA covers the provision of wholesale access for 2G and 3G services to Tele2 NL on a non-discriminatory basis.
- (104) Tele2 NL has a 4G-only network and relies on the NRA with TMNL for 2G and 3G coverage, including for voice calls made by its customers using phones which, whilst 4G-capable, do not support voice calling over 4G (so-called VoLTE). Under the NRA, Tele2 NL pays TMNL [...] The NRA enabled Tele2 to enter the market more efficiently by not requiring it to incur the costs which would have been associated with the build-out of legacy technology layers. At the same time, in light of the national roaming costs that it therefore faces, Tele2 NL has an incentive to reduce these costs by carrying as much of its customers' traffic as possible on its own network and [...].
- (105) The NRA between Tele2 NL and TMNL of August 2013 was negotiated at the same time as the NSA and was amended a number of times between 2013 and 2017.
- (106) [Description of potential alternative strategies envisaged by Tele2 NL with respect to the NRA]
- (107) Neither KPN nor VodafoneZiggo have entered network sharing agreements with another MNO.

6.3.2. *Other telecommunications services providers*

- (108) There are approximately 35 independent MVNOs active in the market for retail mobile telecommunication services in the Netherlands. The main MVNOs that are active in the postpaid segment in the Dutch market are Simpel and Youfone.

6.3.2.1. Simpel

- (109) Simpel.nl B.V. ("Simpel") is an independent MVNO active in the Netherlands with 590 000 customers at the end of 2017⁷³ and it has shown the strongest growth in recent years among independent MVNOs⁷⁴. Simpel sells its plans via its own website and does not own retail shops or use indirect sales partners (whether online or offline)⁷⁵.
- (110) In June 2007, Simpel launched the Simpel mobile brand. In September 2010, TMNL bought Simpel, although it continued to operate as a separate brand. After being acquired by TMNL, Simpel switched from the KPN network to TMNL's network in September 2010. In August 2014, TMNL sold Simpel to Simpel Consumenten B.V. owned by the current management of the company and since then it has been owned by its management. Simpel continues to operate as an MVNO on TMNL's network.

⁷³ Annex "FOREST - Market share estimates 180721 – Final" to Notifying Party's response to RFI 64 of 21 July 2018.

⁷⁴ Telecompaper, Dutch Mobile Operators 2017 Q3, slide 9, Annex 5(14)(1)(9) to the Form CO.

⁷⁵ See Form CO, paragraph 467.

6.3.2.2. Youfone

- (111) Youfone Nederland B.V. ("Youfone") entered the Dutch market in September 2008. At the end of 2017, Youfone had approximately 186 000 customers, increasing from 142 000 in 2016⁷⁶.
- (112) Originally, Youfone was using the Elephant Talk MVNE platform on TMNL's network in the Netherlands. In January 2010, the company switched to the MVNE platform of Aspider Solutions, which uses KPN's mobile network. In Q2 2012, Youfone finished integrating its new platform directly with KPN, without relying on an MVNE.
- (113) Youfone has recently launched a number of non-mobile services. In September 2017, Youfone launched an OTT television service⁷⁷, and in March 2017, it bought Mobicross, a light MVNO and fixed reseller. In 2017, Youfone introduced a number of offerings with data bundles and, in 2018, it introduced data and voice bundles. Youfone distributes its subscriptions online through its website and a selection of retailers.

6.3.2.3. Other MVNOs

- (114) Other MVNOs that are active in the Dutch market include Lebara Group B.V. ("Lebara"), Lycamobile Europe Limited ("Lycamobile") and Albert Heijn B.V. ("AH Mobiel").
- (115) Lebara had approximately 1 million active subscribers at the end of 2017⁷⁸ and is hosted on KPN's network. Lebara Mobile focuses particularly on international mobile SIM-only and prepaid offers (in both voice and data segments) and since 2015 launched a number of innovative services. The company has traditionally focused on prepaid offers for migrant groups but in June 2017, it introduced postpaid plans with 4G data bundles⁷⁹.
- (116) Lycamobile had approximately 770 000 active subscribers at the end of 2017⁸⁰. In the Netherlands, Lycamobile first signed a service provider agreement with TMNL in December 2005 and then moved to Vodafone in April 2009 to become an MVNO on their network. In September 2013, the company ended its network agreement with Vodafone and transferred its customers to KPN's network. Lycamobile is an international MVNO providing low-cost national and international calls, SMS and data.
- (117) AH Mobiel had approximately 200,000 customers at the end of 2017⁸¹. AH Mobiel operates through the brand of Albert Heijn, the largest supermarket chain in the Netherlands. In November 2003, AH Mobiel started offering mobile telecom services via KPN's network. In line with its overall retail strategy of offering customers better value for money by significantly reducing its prices across its entire product range, AH Mobiel's rationale for the switch

⁷⁶ Annex "FOREST - Market share estimates 180721 – Final" to Notifying Party's response to RFI 64 of 21 July 2018.

⁷⁷ That is a television service distributed over the Internet.

⁷⁸ Annex "FOREST - Market share estimates 180721 - Final" to Notifying Party's response to RFI 64 of 21 July 2018.

⁷⁹ Telecompaper, Dutch Mobile Operators 2017 Q3, slide 24, Annex 5(14)(1)(9) to the Form CO.

⁸⁰ Telecompaper, Dutch Mobile Operators 2017 Q3, slide 24, Annex 5(14)(1)(9) to the Form CO.

⁸¹ Telecompaper, Dutch Mobile Operators 2017 Q3, slide 27, Annex 5(14)(1)(9) to the Form CO.

from KPN to Telfort's network was motivated by its desire to reduce end-user prices. After KPN's takeover of Telfort at the end of 2005, the mobile networks were migrated and consolidated.

6.3.2.4. Regulatory regime regarding MVNOs

- (118) Relevant regulation concerning MVNOs may typically include, on the one hand, regulatory requirements that MVNOs have to comply with in order to enter the a retail mobile market and, on the other hand, obligations imposed upon MNOs to facilitate market entry of MVNOs.
- (119) As regards regulatory requirements for MVNO entry, in the Netherlands, MVNO entry is subject to the MVNO notifying the ACM to that effect, pursuant to Chapter 2 of the Dutch Telecommunications Act.
- (120) Under the European Regulatory Framework, the general authorisation for communications providers to provide communications networks and services may be subject to the conditions specified in the Annex to the Authorisation Directive.
- (121) Hence, from a legal perspective, a new entrant planning to be active as an MVNO needs to negotiate a wholesale access agreement with an MNO and to comply with the Dutch Telecommunications Act and the conditions set by ACM.
- (122) There are no regulatory obligations upon MNOs to grant wholesale access to MVNOs in the Netherlands⁸². In this respect the ACM in its report on "Bundling of telecom services and content in the Netherlands. Analysis of the possible consequences for competition" stated that "[t]here is no access regulation in the case of mobile networks, because there are already four competing networks. All access agreements in this market have therefore been concluded on the basis of commercial considerations."⁸³.

6.4. Convergence and multi-play offers

- (123) There is a current trend for the distinction between fixed and mobile networks to become less relevant, so-called 'convergence'. There are two elements of convergence: (i) technological convergence; and (ii) bundles of fixed and mobile services sold together.
- (124) Technological fixed-mobile convergence generally takes the form of using mobile broadband as a substitute for fixed broadband. By way of example, in *T-Mobile Austria / UPC Austria*⁸⁴ based on the specificities of the Austrian market, a relevant product market for home internet access services, including both fixed and mobile technologies, was defined for residential customers. In certain areas of the Netherlands, TMNL offers home broadband via its mobile network. The Commission notes that a panel survey has recently revealed that Dutch consumers are increasingly interested in replacing fixed broadband with mobile broadband if speed is the same (44% of respondents) and the price is convenient (53%)⁸⁵.

⁸² See Form CO, para. 518.

⁸³ ACM, Bundling of telecom services and content in the Netherlands. Analysis of the possible consequences for competition, July 2017, Annex 5 (14)(4)(1) to the Form CO, section 2.1.2.

⁸⁴ Commission decision of 9 July 2018 in case M.8808 – *T-Mobile Austria / UPC Austria*, paragraphs 17.

⁸⁵ Telecompaper, Dutch Mobile Operators 2017 Q3, slide 30, Annex 5(14)(1)(7) to the Form CO.

- (125) As regards the second aspect of convergence, as in other Member States, an increasing number of Dutch customers purchase multiple telecommunications services from a single provider in a bundle. These 'multiple play' offers comprise two or more of the following services to retail customers: mobile telecommunications services, fixed telephony, fixed internet access and television services. Multiple play comprising two, three or four of these services is referred to as dual play ("2P"), triple play ("3P") and quadruple play ("4P") respectively. Multiple play comprising any combination of two or more of these fixed services without a mobile component is referred to as "fixed multiple play". Multiple play comprising one or more of these fixed services in combination with a mobile component (including either voice or data, or both together) is referred to as "fixed-mobile multiple play" or a "fixed-mobile convergent" offering ("FMC"). Fixed-mobile multiple play may involve a single mobile subscription (SIM card) or more than one mobile subscription combined with the fixed subscription.
- (126) When purchasing multiple services from a single supplier in a bundle, customers may benefit from a lower price for one or all of the components or receive additional benefits. These additional benefits such as extra data or other value added services are referred to as 'positive discounting'. The benefits accrue irrespective of whether customers have a single contract or separate contracts with the same provider for these services.
- (127) FMC bundles can be offered by mobile operators either on the basis of their own fixed network or on the basis of wholesale access services purchased from operators owning a fixed network. Competition in the broadband fixed market in the Netherlands is maintained by means of access regulation. The former incumbent KPN is required to open its network to other market participants, so that they can also use that network to serve customers. More precisely, KPN owns and operates a fibre to the home ("FttH") network and a hybrid fibre-copper network, which are both subject to ex ante regulation in the form of local unbundling and virtual unbundled local access ("VULA") under the terms of the ACM's decision of 17 December 2015 resulting from the market review carried out from October 2013 to October 2015. The Parties are among the largest customers of wholesale access of KPN⁸⁶.
- (128) The adoption rates of multiple play bundles in the Netherlands were discussed extensively in the Commission's decision in case M.7978 – *Vodafone/Liberty Global/Dutch JV*⁸⁷. In that decision, the Commission considered that the bundling of fixed services (namely, broadband, fixed line and TV) was quite common but that bundles including a mobile element were at that time of

⁸⁶ ACM, Bundling of telecom services and content in the Netherlands. Analysis of the possible consequences for competition, July 2017, section 2.1.2, Annex 5 (14)(4)(1) to the Form CO.

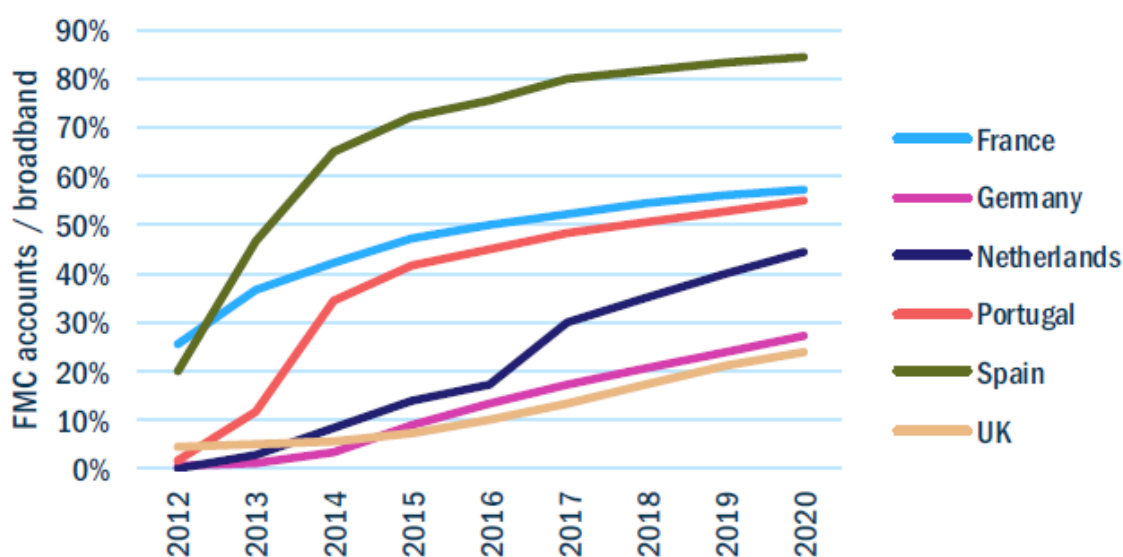
The Parties' position on the fixed telecommunication markets is nonetheless marginal. In fact, considering subscribers, their combined market share in the overall consumer and business broadband services is [5-10]% ([5-10]% in revenues); in consumer and business broadband services, taken separately, the combined market shares are [5-10]% ([5-10]% in revenues) and [0-5]% ([5-10]% in revenues) respectively. Their combined market share in the overall consumer and business voice services is [5-10]% ([5-10]% in revenues); in consumer and business voice services, taken separately, the combined market shares are [5-10]% ([0-5]% in revenues) and [0-5]% ([5-10]% in revenues) respectively. The incremental market share does not exceed [0-5]% in any segment.

⁸⁷ Commission decision of 3 August 2016 in case M.7978 – *Vodafone/Liberty Global/Dutch JV*, paragraphs 100 and following.

marginal importance. The Commission considered that the inclusion of a mobile element in a multi-play bundle was in a nascent stage of development in the Netherlands and was far less widespread compared to fixed dual play and triple play multiple play packages. Whereas there were certain indications that fixed-mobile multiple play was expected to increase in importance in the Netherlands (as evidenced by the nature of that transaction itself) it was unclear how fast this development would progress and what the potential for growth of quadruple play on the market was.

- (129) According to the ACM Position Paper, in Q1 2018 around 15% of all the SIMs in the Netherlands (excluding M2M) were sold in a bundle with a fixed telecommunications product, and that this will increase to around 22% at the end of 2022.
- (130) On the basis of its analysis, the ACM is of the view that the growth of FMC subscriptions will level off. It expects that in the long run the share of FMC subscriptions will oscillate around 25% giving ample room, i.e. around 75%, for mobile-only subscriptions⁸⁸.
- (131) The Notifying Party has provided data demonstrating that around 35% of mobile subscriptions are purchased as part of a fixed / mobile bundle and set to increase to around 45% by 2020, which would make it the fourth highest in the Union, as shown in Figure 13.

Figure 13 – FMC penetration in fixed broadband accounts, 2012 - 2020



Source: Analysys Mason report prepared for Tele2 NL: "Impact of FMC uptake and the mobile-only market opportunities in the Netherlands", 20 June 2017, slide 3 provided in response to RFI 22 of 15 May 2018 [ID 718]

- (132) In the Netherlands the two main players providing FMC bundles are KPN and VodafoneZiggo. KPN introduced its first FMC offering in 2013. KPN offers a variety of benefits for customers that purchase both its fixed and mobile

⁸⁸ See ACM, "Advies Multibandveiling 2019", 10 October 2017, paragraph 123 and paragraph 133, Form CO Annex 5(14)(4)(2).

services, such as increased mobile data, a discount on the mobile subscription and the choice of a free television package although it continues to invoice for the fixed and mobile services separately⁸⁹.

- (133) Following the completion of the joint venture between Vodafone and Ziggo, VodafoneZiggo announced its first FMC proposition in 2017. VodafoneZiggo offers similar benefits to KPN for customers that purchase both its fixed and mobile services, such as increased mobile data, a discount on the mobile subscription and an additional television package. Similarly to KPN, customers do not purchase a single quadruple play service from VodafoneZiggo. Customers receive an invoice under the Ziggo brand for fixed services and an invoice under the Vodafone brand for the mobile services⁹⁰.
- (134) TMNL and Tele2 NL have either no or a very limited FMC proposition. TMNL initially offered fixed internet through its Euronet business division, which partly had its own fixed infrastructure. In 2014, TMNL sold this division in order to focus on its mobile offering. However, in Q3 2017, following its acquisition of the assets which Vodafone undertook to divest pursuant to its joint venture with Ziggo, TMNL started offering an FMC product⁹¹.
- (135) Tele2 NL does not offer FMC bundles to private customers in the Netherlands. However, it does offer such bundles to business customers.

6.5. Distribution system

- (136) The Dutch MNOs distribute their services using a mix of direct and indirect distribution channels. The direct channels usually include MNOs' branded shops, internet platforms and telesales. Indirect channels include independent distributors and online and offline resellers which typically market the products and services of multiple mobile providers.
- (137) Overall, the Dutch operators rely predominantly on direct distribution, though there are a number of independent distributors active in the Netherlands, including Mobiel.nl and Belsimpel. For business customers, there are a number of regional indirect distributors who cater predominantly to SoHo and SME customers.
- (138) The Notifying Party estimates that, in 2017, [70-80]% of new private customers of retail mobile telecommunications services (expressed in gross adds⁹²) were acquired via direct sales channels, while [...] [20-30]% was acquired via indirect sales channels. Figure 14, taken from TMNL's internal documents, illustrates this graphically: it represents the new customers acquired by the various players in the market by sale channel, distinguishing also between online and offline sale channels.

[Figure 14 - Relative importance of sales channels](#)

[...]

⁸⁹ ACM, Bundling of telecom services and content in the Netherlands. Analysis of the possible consequences for competition, July 2017, section 2.2.1, Annex 5 (14)(4)(1) to the Form CO.

⁹⁰ See VodafoneZiggo's response to RFI 27 of 2 May 2018, paragraph 4.1 [ID 2235].

⁹¹ ACM, Bundling of telecom services and content in the Netherlands. Analysis of the possible consequences for competition, July 2017, section 3.1.2.iii, Annex 5 (14)(4)(1) to the Form CO.

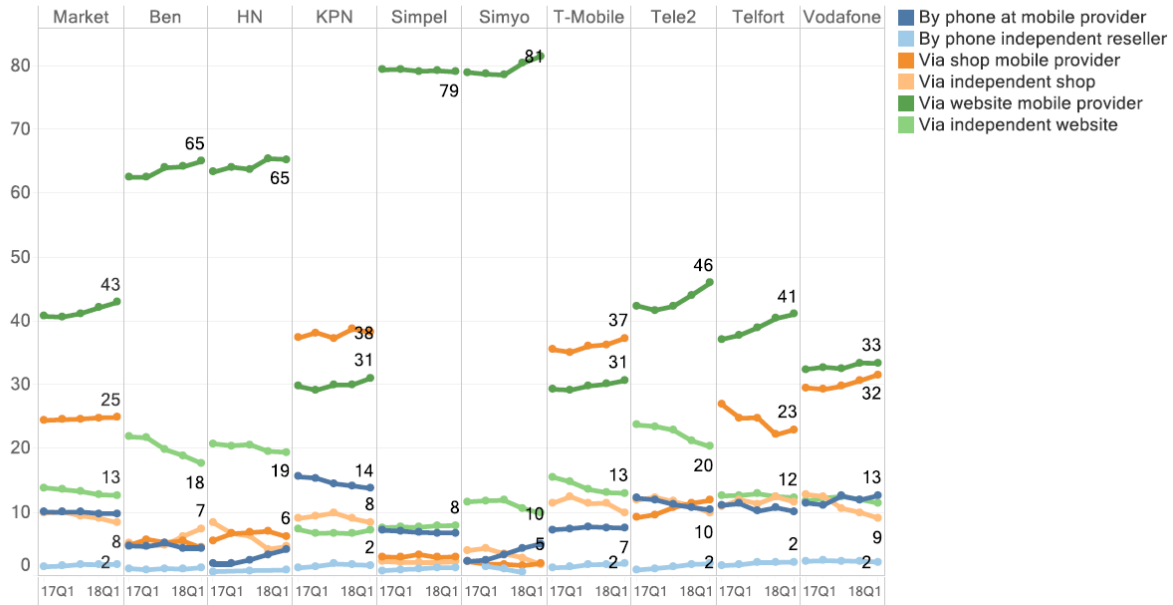
⁹² For a definition of gross adds, see recitals 365 - 366.

[...] ⁹³.

- (139) This is in line with a Telecompaper report regarding postpaid private subscriptions which confirms that direct sales channels have a more prominent role than indirect sales channels in the Netherlands, as illustrated in Figure 15.

Figure 15 - Relative importance of sales channels

43% of subscriptions are bought via the website of the current mobile provider, 25% at the provider's shop. The latter scored higher at KPN, T-Mobile and Vodafone.



Source: Telecompaper, Postpaid Mobile Insight, 2018 Q1, slide 33, submitted in response to RFI 38 by the Notifying Party [ID 842].

6.6. Competitive conditions

- (140) Based on the results of the Market Investigation the Commission observes that the Dutch market for retail mobile telecommunication services is currently characterised by effective competition. ACM concluded this in its recent opinion on the current competitive situation to the Dutch Ministry of Economic Affairs dated 10 October 2017⁹⁴. This view is shared by respondents to the Market Investigation⁹⁵ and by third party analysts^{96 97}.
- (141) The competitive environment is strengthened by the fact that physical shops and online distribution channels are perceived as interchangeable by the majority of the participants to the Market Investigation and that customers are still very price sensitive, especially regarding SIMO contracts, and able to compare a lot of different offers online⁹⁸.

⁹³

[...].

⁹⁴

ACM, Advice multi-band auction 2019, Annex 5(14)(4)(2) to the Form CO.

⁹⁵

Responses to RFI 23 to non-MNOs of 2 May 2018, questions C.B.4, C.B.5, C.B.6.1; Responses to RFI 24 to Distributors of 2 May 2018 questions 24-25.1.

⁹⁶

Telecompaper, Dutch Mobile Operators 2018 Q1, slide 5, Annex 10 to the Article 6(1)(c) Response.

⁹⁷

Ovum, Netherlands Update, October 2016, p. 3, Annex 5(15)(11) to the Form CO.

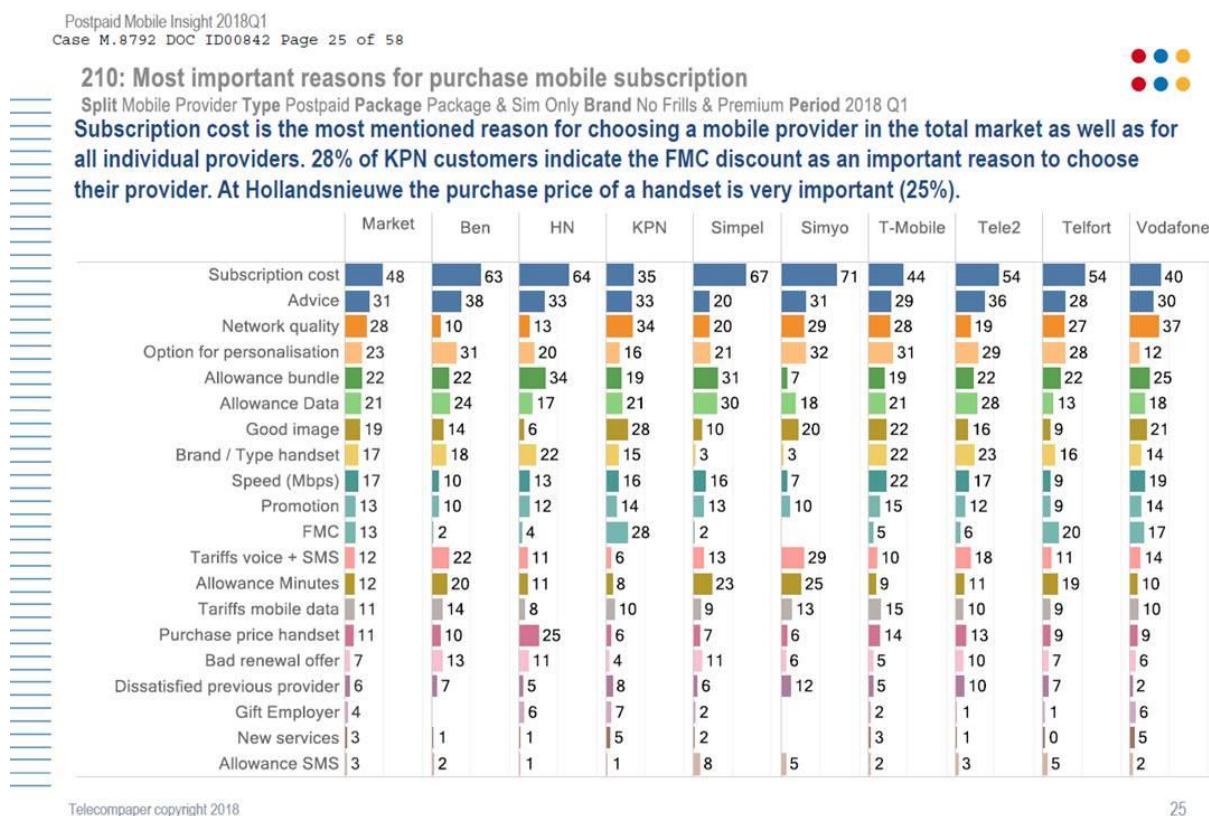
⁹⁸

Responses to RFI 24 to distributors of 2 May 2018, question 7, 7.1, 8 and 8.1.

6.6.1. Competitive parameters

- (142) The Commission has investigated the relative importance of different parameters of competition in the retail market for mobile telecommunications services in the Netherlands. On the basis of the Market Investigation, the Commission considers that price is a primary parameter of competition in relation to the provision of retail mobile telecommunications services in the Netherlands.
- (143) Indeed, based on the results of the Survey, it appears that for private customers of TMNL, Tele2 NL and Simpel the most important parameter of competition is [...] price. This is the case for about [...] of TMNL's, almost [...] of Tele2 NL's and more than [...] of Simpel's interviewed private customers. Price is followed by network reliability and coverage for Tele2 NL's and Simpel's private customers, whereas the range and quality of the handset offer is slightly higher ranked for TMNL's private customers.
- (144) The importance of price is confirmed by a Telecompaper survey of the Dutch postpaid segment. Also according to this report, subscription cost is the most mentioned reason for choosing a mobile provider – see Figure 16.

Figure 16 - Most important reasons for purchase mobile subscription



Source: Telecompaper, Postpaid Mobile Insight, 2018 Q1, slide 25, submitted in response to RFI 38 by the Notifying Party [ID 842].

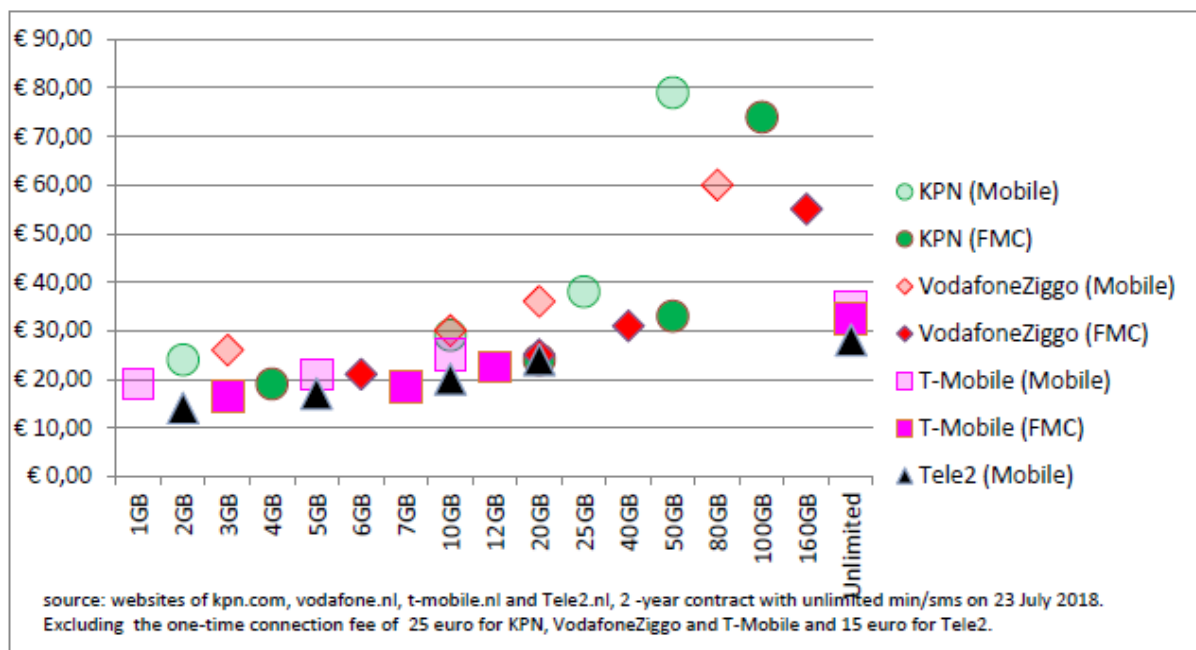
- (145) Also according to all of the Parties' competitors, the most important parameter of competition for private customers is price, followed by network reliability and coverage, download speeds and, at distance, customer service. In the view of competitors, the ability to provide fixed telecommunication services is the

least important parameter of competition as driver in private customers' choice⁹⁹.

6.6.2. Overview of price related competition

- (146) As noted in Section 6.6.1., the Market Investigation indicates that price is the primary competition parameter in the Dutch retail private mobile telecommunications market.
- (147) In the ACM Position Paper, the ACM has prepared a comparison of the tariffs offered by the four MNOs active on the Dutch market, replicated at Figure 17. As data allowances appear to be the main focus of competition in the Netherlands, those allowances are used as primary point of references in the comparison of operators' tariffs.
- (148) Figure 17 shows that for bundles up to 20GB, there are no material differences between the pricing of each of the four MNOs. The ACM notes however in the ACM Position Paper, that for the higher volume bundles, taking into account discounts and additional data allowances when purchasing mobile in a bundle with fixed telecommunications services, most of TMNL's and Tele2 NL's subscriptions are priced lower or provide more GB per month than KPN and VodafoneZiggo's offers.

Figure 17 - Monthly mobile prices with and without FMC offers



Source: ACM Position Paper, Section 4.2.

- (149) The Commission also makes the following observations regarding this chart. First, it only takes into account 'above the line' tariffs, that is publicised tariffs and discount, and not 'below the line' offers, that is additional discounts and other promotions resulting in modification from the publicised tariffs. The Commission notes that a small percentage of each of the Parties' gross adds relate to below the lines offers (that is, [5-10]% for TMNL and [5-10]% for

⁹⁹ Responses to RFI 26 and 27 to KPN and VodafoneZiggo of 2 May 2018, question 12 [ID 1175, 2235] and to RFI 23 to non-MNOs of 2 May 2018, question C.A.1.

Tele2 NL, see Form CO, paragraphs 394 and 411). Second, it does not take into account other non-price related advantages that may be granted to customers as part of KPN and VodafoneZiggo's offers (as detailed in recitals 570 and 579). Moreover the data it has presented does not include tariffs from MNO's second brands or MVNOs.

7. RELEVANT MARKETS

- (150) Market definition is a tool to identify and define the boundaries of competition between firms. It has both a product and a geographic dimension.
- (151) A relevant product market comprises all those products and/or services which are regarded as interchangeable or substitutable, by reason of the products' characteristics, their prices and their intended use. In defining the relevant product market, the Commission assesses demand substitution by determining the range of products which are viewed as substitutes by the consumers. Demand-side substitutability is the focus of the Commission's assessment when defining the relevant markets¹⁰⁰.
- (152) The Commission may also take into account supply-side substitutability, namely when its effects are equivalent to those of demand substitution in terms of effectiveness and immediacy. This is the case when suppliers are able to switch production to the relevant products and market them in the short term without incurring significant additional costs or risks in response to small and permanent changes in relative prices¹⁰¹.
- (153) The relevant geographic market comprises the area in which the undertakings 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 areas¹⁰².

7.1. Retail mobile telecommunication services

- (154) MNOs and MVNOs provide retail mobile telecommunications services to end users, that is to say subscriptions to access public mobile telecommunications networks. Such access allows end users to make voice calls, send and receive text messages and use mobile data.

7.1.1. Product market definition

7.1.1.1. Retail mobile and fixed telecommunication services

A. Commission precedent

- (155) In past decisions, the overall retail mobile market was considered distinct from the supply of retail fixed telecommunications services¹⁰³.

¹⁰⁰ Commission Notice on the definition of relevant market for the purposes of Community competition law Market Definition Notice, OJ C 372, 9.12.1997, p. 5–13 ("Market Definition Notice") points 7 and 15.

¹⁰¹ Market Definition Notice, point 20.

¹⁰² Market Definition Notice, point 8.

¹⁰³ Commission decision of 11 May 2016 in case M.7612 – *Hutchison 3G UK/Telefonica UK*; Commission decision of 2 July 2014 in case M.7018 – *Telefónica Deutschland/E-Plus*; Commission decision of 28 May 2015 in case M.6992 – *Hutchison 3G UK/Telefónica Ireland*; Commission decision of 1 March

B. *The Notifying Party's views*

- (156) In line with Commission precedent the Notifying Party submits that the relevant market is for mobile telecommunications services.

C. *The Commission's assessment*

- (157) Consistent with previous decisions in the mobile telecommunications sector, the Commission considers that mobile telecommunications services constitute a separate market from fixed telecommunications services. Among other things, mobile services provide end users with different functionalities from those offered by fixed services, in particular with the ability to communicate on the go.
- (158) A number of respondents to the Market Investigation noted that the distinction between mobile and fixed services is becoming increasingly blurred¹⁰⁴. The reasons for this include the fact that for certain consumers high speed mobile services have become a viable alternative to fixed line internet access, television services are increasingly being substituted by video streaming, there is an increasing penetration of fixed-mobile bundles and VoIP and cloud solutions allow fixed telephony to "migrate" to mobile devices.
- (159) Respondents to the Market Investigation also indicated that although the process is underway, it is not yet complete and the two services still belong to separate markets, with a substantial portion of customers still buying both mobile services and fixed telecommunication services¹⁰⁵. Moreover, while mobile services may sometimes substitute for fixed, the reverse does not hold.
- (160) Accordingly, the Commission considers the relevant market to be the retail market for mobile telecommunication services, excluding fixed telecommunication services.

7.1.1.2. Mobile services and WiFi

A. *Commission precedent*

- (161) In previous decisions, the Commission has concluded that public and shared WiFi is not part of the same market as mobile telecommunication services. This conclusion was based on a number of considerations, such as the fact that the availability in terms of coverage and the characteristics (in terms for example of quality of service, security and ease of use) of the two technologies are quite different. In particular, WiFi lacks the network density of mobile services, has different propagation characteristics and lacks service continuity, that is the ability to maintain the connection as a subscriber moves across different areas. With respect to quality, traffic congestion is an issue difficult to control on WiFi, which is in principle open to everyone, while it can be handled more effectively on MNOs' mobile networks, operated on the basis of a spectrum licence¹⁰⁶.

2010 in case M.5650 – *T-Mobile/Orange*; Commission decision of 1 September 2016 in case M.7758 – *Hutchison 3G Italy/WIND/JV*.

¹⁰⁴ See responses to RFI 23 to non-MNOs of 2 May 2018, questions B.A.1 and B.A.1.1.

¹⁰⁵ See responses to RFI 23 to non-MNOs of 2 May 2018, question B.B.2.2., where percentages of mobile-only customers range from 20% to 50% to 90% with respondents that consider that in the future all customers will migrate to bundled offers.

¹⁰⁶ Commission decision of 11 May 2016 in case M.7612 – *Hutchison 3G UK/Telefonica UK*, recital 253; Commission decision of 1 September 2016 in case M.7758 – *Hutchison 3G Italy/WIND/JV*, para. 127.

B. The Notifying Party's views

- (162) The Notifying Party submits that WiFi is widely available to users at home, at work and on the go (in bars, restaurants, railway stations, airports, petrol stations, shopping malls, etc.) and typically free of charge. It submits that Dutch consumers rely on WiFi more than users in other countries. It argues that using OTT services (or indeed downloading data more generally) over a handset connected to WiFi can be an alternative to traditional voice, SMS and data services.
- (163) The Notifying Party argues that use of OTT communication apps over WiFi, in particular, needs to be taken into account in either the Commission's definition of the market, or in its competitive analysis. It submits that by shifting part of their traffic to the WiFi infrastructure, customers can reduce their mobile traffic and hence downsize their mobile packages.

C. The Commission's assessment

- (164) The Market Investigation clearly indicated that despite being widely available in public places within the Netherlands, WiFi cannot be considered as a substitute for a mobile telecommunications subscription¹⁰⁷. In particular, a number of respondents to the Market Investigation indicated that the quality of the connection is not consistent across the whole country¹⁰⁸. In addition, some pointed to the fact that WiFi is not always user friendly and that it raises some security and privacy concerns with some customers¹⁰⁹.
- (165) The Commission therefore concludes that public and shared WiFi services cannot be considered as part of the same market as mobile telecommunications services. Accordingly, and for the reasons set out in Section 7.1.1.3, the Commission does not consider that the use of OTT communication apps over WiFi are part of the relevant market.

7.1.1.3. Mobile telecommunications services and OTT services

A. Commission precedent

- (166) In previous cases, the Commission's market investigation produced mixed results on the substitutability between OTT services and mobile services, finding some support for substitutability on the one hand and some limitations on the other. The Commission ultimately concluded that OTT services do not fall within the same relevant market as mobile telecommunications services, as OTT services rely on mobile telecommunications (data) services (and fixed broadband services) to function¹¹⁰.

B. The Notifying Party's views

- (167) The Notifying Party argues for an expansion of the relevant market to include OTT services such as instant messaging (e.g. WhatsApp, Facebook Messenger, Apple iMessage) and voice over IP ("VoIP" e.g. WhatsApp, Skype, Apple FaceTime). The Notifying Party submits that these services should be included in the relevant market given the specific circumstances of the Dutch market,

¹⁰⁷ See responses to RFI 23 to non-MNOs of 2 May 2018, question B.C.1.

¹⁰⁸ See responses to RFI 23 to non-MNOs of 2 May 2018, questions B.C.3 and B.C.3.1.

¹⁰⁹ See responses to RFI 23 to non-MNOs of 2 May 2018, questions B.C.1.1 and B.C.1.2.

¹¹⁰ Commission decision of 1 September 2016 in case M.7758 – *Hutchison 3G Italy/WIND/JV*, recital 145, Commission decision of 11 May 2016 in case M.7612 – *Hutchison 3G UK/Telefonica UK*, recital 265.

namely that they are heavily used by customers and interchangeably with traditional voice mobile and SMS services.

C. *The Commission's assessment*

- (168) By definition, OTT services need an internet connection (whether individual mobile connection on the handset, fixed broadband services or a public or private WiFi) to function. As they depend on data services to function and voice, SMS and data services are part of the same market, OTT services cannot substitute retail mobile telecommunications services.
- (169) The Commission therefore concludes that OTT calling and messaging services, whether provided over WiFi or a mobile telecommunications data networks, cannot be considered as being part of the same market as mobile telecommunications services.

7.1.1.4. Private and business customers

A. *Commission precedent*

- (170) In its review of previous mergers in the mobile telecommunications sector, the Commission has considered whether separate markets for private and business customers could be identified. In the investigations related to these mergers, the Commission collected several factual elements that pointed to a potential segmentation of the market based on the type of end-user.
- (171) In the *T-Mobile/Orange UK* decision, the Commission found that business customers were considered 'heavy users' as compared to private customers¹¹¹. In the *Hutchison 3G Austria/Orange Austria* decision, the Commission found that there might be distinct demands for private and business customers¹¹². In the *Hutchison 3G UK/Telefónica Ireland* decision, the Commission found that mobile operators typically consider business customers as a distinct group, and that business customers obtain *ad hoc* conditions which usually include a dedicated support team and better rates than private customers¹¹³. In the *Telefónica Deutschland/E-Plus* decision, the Commission found that, in Germany, business customers had specific requirements that were different from standard private tariffs, and that they were mainly served by MNOs¹¹⁴. In the *Hutchison 3G UK/Telefónica UK* decision, the results of the market investigation suggested that there were differences between services provided to business and private customers in view of the different requirements of the two customer groups¹¹⁵. A similar finding was reached in *Hutchison 3G Italy/Wind/JV*¹¹⁶.
- (172) However, in none of those cases did the Commission identify separate markets for the provision of retail mobile telecommunications services to private customers and to business customers. This was principally due to supply-side

¹¹¹ Commission decision of 1 March 2010 in case M.5650 – *T-Mobile/Orange*, recital 21.

¹¹² Commission decision of 12 December 2012 in case M.6497 – *Hutchison 3G Austria/Orange Austria*, recitals 34 to 35.

¹¹³ Commission decision of 28 May 2014 in case M.6992 – *Hutchison 3G UK/Telefónica Ireland*, recital 149.

¹¹⁴ Commission decision of 2 July 2014 in case M.7018 – *Telefónica Deutschland/E-Plus*, recitals 34-35.

¹¹⁵ Commission decision of 11 May 2016 in case M.7612 – *Hutchison 3G UK/Telefónica UK*, recital 278.

¹¹⁶ Commission decision of 11 May 2016 in case M.7758 – *Hutchison 3G Italy/Wind JV*, recitals 155-157.

substitutability considerations relevant to the area of overlap between the parties involved in those cases.

B. The Notifying Party's views

- (173) The Notifying Party submits that it is not appropriate to divide the mobile retail market into separate business and private markets.
- (174) The Notifying Party submits, in particular, that the services provided to business customers are essentially the same as those provided to private customers and therefore a high level of supply-side substitutability exists between the services.
- (175) In addition, the Notifying Party submits that: (i) mobile operators cannot and do not distinguish between private and business users when allocating capacity on their networks; (ii) in the Netherlands, MNOs generally use the same brands for private and business customers; (iii) customer services levels for private and business customers are generally the same; and (iv) the line between private and business use of mobile phones is becoming increasingly blurred.

C. The Commission's assessment

(i) Demand side

- (176) According to paragraph 36 of the Market Definition Notice, the product characteristics and intended use constitute a first element to be considered to identify the relevant markets, but are insufficient to show whether two products are substitutes on the demand side. Indeed, functional interchangeability or similarity in characteristics may not, in themselves, provide sufficient criteria, because the responsiveness of customers to relative price changes may be determined by other considerations as well.
- (177) The Commission also notes that according to the Market Definition Notice, a distinct group of customers may constitute a distinct, narrower, market when such a group could be subject to price discrimination. This will usually be the case when two conditions are met: (i) it is possible to identify clearly which group an individual customer belongs to at the moment of selling the relevant products to them; and (ii) trade among customers or arbitrage by third parties should not be feasible¹¹⁷. In the Commission's view, these two conditions would be met in the case of the distinction between business and private customers.
- (178) In fact, the evidence in the Commission's file shows that mobile operators can easily distinguish private customers from business customers. Indeed, to be eligible for a business subscription, a customer needs a business registration number or VAT number¹¹⁸. Consequently, the Commission further notes that private customers cannot switch to business subscriptions as they do not have a business registration number or VAT number.
- (179) The Commission notes that, using average revenues per user ("ARPU") as a measure of prices, the ARPU for business subscriptions is substantially greater than the ARPU of private subscriptions, including both prepaid and postpaid subscriptions. For example, when looking at the market share data submitted

¹¹⁷ Market Definition Notice, paragraph 43.

¹¹⁸ Notifying Party's response to RFI 64 of 21 July 2018, question 7.

by the Notifying Party¹¹⁹, the ARPU of business subscriptions is about [...] to [...] higher than the ARPU for private subscriptions between 2015 and 2017. When comparing postpaid subscriptions only, the ARPU of business subscriptions is still [...] to [...] higher than the ARPU of private subscriptions between 2015 and 2017. These large differences in ARPU are evidence of both demand for different services, and a difference in willingness to pay between business and private customers.

- (180) The Notifying Party itself has acknowledged that there are certain differences between private customers and business customers, as well as between different groups of business customers in terms of contract formation, contract performance, and FMC penetration (the latter being lower for business customers than for private customers)¹²⁰.
- (181) In particular, as regards contract formation, the Notifying Party explained that:
- for consumers and individual professionals or businesses ("small office/home office" or "SoHo"), subscriptions are typically sold through retail channels (including via retail partners), online channels and telesales and there is no negotiation of terms and/or tariffs;
 - for small and medium enterprises ("SME"), subscriptions are typically sold through information and communication technology and telecommunications service providers, telesales and regional account managers and sometimes there is negotiation of contract terms, based on an initial offer by the service provider;
 - for large business customers, sales are more likely to be via a key accounts team and there is always negotiation of the terms of contract;
 - for public administration, tenders are organised accordance with Union public procurement rules¹²¹.
- (182) Moreover, the Notifying Party explained that pursuant to the Dutch Telecommunications Act, the maximum duration for consumer contracts is 24 months, whilst this limitation does not apply to business contracts, where the duration can be longer, in particular for large businesses.
- (183) As regards contract performance, the Notifying Party explained that:
- consumer contracts are mainly performed via the provider's own shops and telesales;
 - contracts with SoHo customers are performed via call centres, telephone account managers and online;
 - for all other business customers, contracts are performed via account managers (either in person or via telephone).
- (184) The Market Investigation also indicated that business customers appear to have different needs to private customers.
- (185) In this respect, the Market Investigation provided mixed replies as to demand side substitutability¹²². A number of business customers, including some large

¹¹⁹ See Annex to Response to RFI 64.

¹²⁰ Form CO, paragraph 129.

¹²¹ Form CO, footnote 96.

¹²² See responses to RFI 23 to non-MNOs of 2 May 2018, questions B.E.1. and B.E.1.1.

ones, indicated that they bought a functionality similar to that a private customer would buy, perhaps only at preferential terms due to bulk purchasing. Others noted that they did however receive certain additional services including dedicated post-sale assistance¹²³, user portal, coverage and quality parameters; specific security measures¹²⁴; use of embedded SIMs in specific terminal devices¹²⁵; the purchase of data-only subscriptions for on-sale of value-added services to end customers¹²⁶; multi-country purchasing with added functionality such as in-building coverage, roaming, data protection and audit¹²⁷.

- (186) The fact that business customers, in particular larger business customers, have different needs and require additional services is also demonstrated by the fact that TMNL offers some tailored add-on services to very large accounts, namely those with [...] ¹²⁸. Similarly Tele2 NL offers some tailored add-on services to particularly large customers.
- (187) The differences between private and business customers is corroborated by the Parties' internal documents, which assess separately the specific needs of business customers, and analyse separately the competitive dynamics for the provision of retail mobile telecommunications services to "B2B" (business to business) and "B2C" (business to consumer) independently¹²⁹.
- (188) The Commission notes that there are business customers (mainly SoHo customers) that find it convenient to buy subscriptions designed for private customers¹³⁰. In this respect the Commission considers that this fact has no bearing on a finding of demand-side substitutability between private and business customers. Indeed, the fact that certain SoHo businesses, in reason of their specific requirements, identify themselves as private customers for mobile telecommunications services, as private subscriptions best match their needs, does not contradict the Commission's findings. Those SoHo businesses are effectively private customers for the purposes of the provision of mobile telecommunications services to them.
- (189) If nonetheless one wanted to consider this as an element indicating substitutability, such demand side substitutability would in any event be limited only to a specific customer subset. Indeed, while on the one hand private customers cannot take business subscriptions in view of their lack of eligibility and larger business customers would not take private subscriptions in view of their specific needs, only smaller business customers could potentially switch from business to private subscriptions and vice versa. Based on the data submitted by the Parties, this subset of customer accounts for [10-20] % of all retail mobile subscribers in Q1 2018¹³¹.
- (190) On this basis, the Commission concludes that from the demand side, two separate customer groups are identifiable with respect to the provision of retail

¹²³ See responses to RFI 25 to business customers of 2 May 2018, questions 7.1 and 7.2.

¹²⁴ Dutch Police's response to RFI 54 of 12 July 2018 question 6.1 [ID 1289].

¹²⁵ Dutch railways' response to RFI 54 of 12 July 2018 question 8 [ID 1223].

¹²⁶ Geodirect's response to RFI 54 of 12 July 2018, question 5 [ID 1179].

¹²⁷ ING's response to RFI 54 of 12 July 2018, question 5 [ID 523].

¹²⁸ Parties' response to RFI 64 of 21 July 2018, question 10.

¹²⁹ See for example Tele2 NL internal documents, [...] and TMNL internal documents, [...].

¹³⁰ See responses to RFI 24 to distributors of 2 May 2018, questions 16 and 16.1.

¹³¹ See Annex to Response to RFI 64 of 21 July 2018.

mobile telecommunications services: private customers and business customers (the latter including large business customers and smaller business customers which decide not to purchase private subscriptions).

(ii) Supply side

- (191) While MNO respondents to the Market Investigation indicated complete supply side substitutability between private and business customers¹³², other evidence from the Market Investigation indicates that there may be certain factors which limit the degree of supply side substitution between private and business customers.
- (192) First, the Notifying Party itself acknowledged the existence of differences in their organisational set-up to provide required services to business customers (in particular the largest ones), as well as the need to offer add-on services and the FMC penetration.
- (193) Second, almost none of the large business customers that responded to the Market Investigation believed MVNOs would be able to provide the required service level and Tele2 NL was viewed by about half of the respondents as able to do so¹³³. This is because of their specific needs as highlighted in the above.
- (194) Third, MVNOs and other non-MNOs themselves mostly argued that a business-focused MVNO would face considerable obstacles to be able to start serving private customers quickly and a slightly smaller percentage, but still a majority, of respondents also indicated that the opposite substitution would be similarly difficult¹³⁴.
- (195) Taken together, the evidence on the file indicates that MVNOs are able to target and serve business customers, but only where those customers have needs that are similar to those of a private customer. There remains a category of business users which cannot easily be delimited in terms for example of turnover or number of employees, which MVNOs are unable to address either on economic grounds or because they do not control their own network and therefore are unable to provide the degree of customised control required.
- (196) It follows that, while it is relatively easy from a demand perspective to segment the market between private and business customers by virtue of the fact that business customers have an incentive to provide VAT numbers and may be required to furnish proof of incorporation or self-employed status, there is a possibility of substitution on the supply-side.

(iii) Conclusion

- (197) In light of the supply-substitutability in particular, the Commission considers that for the purpose of this Decision the relevant market is the overall retail market for the provision of mobile telecommunications services to all end customers, including both private and business customers.

¹³² See responses by KPN to RFI 26 and VodafoneZiggo to RFI 27 of 2 May 2018 respectively [ID 1175, 2235].

¹³³ See responses to RFI 54 to business customers of 12 July 2018, question 13.

¹³⁴ See responses to RFI 53 to non-MNOs of 11 July 2018, questions 4, 4.1, 5, 5.1.

7.1.1.5. Prepaid and postpaid

A. *Commission precedent*

(198) In previous cases, the Commission has examined a possible segmentation of the overall market for retail mobile telecommunication services between prepaid and postpaid services. In those cases, it has considered that for the purpose of assessing those concentrations, prepaid and postpaid services did not constitute separate product markets but rather market segments within an overall retail market¹³⁵.

B. *The Notifying Party's views*

(199) The Notifying Party argues that in line with Commission precedent, the Transaction should be assessed on the basis of an overall retail market for mobile telecommunications services but contests the existence of limits to supply-side substitutability between prepaid and postpaid services.

C. *The Commission's assessment*

(200) From a demand side, the Market Investigation indicated that regardless of the payment arrangement, the service offered remains substantially the same.

(201) On the other hand, the Market Investigation indicated that there may be limits to supply-side substitutability given that not all MVNOs offer both prepaid and postpaid services. Respondents to the Market Investigation identified a number of obstacles for MVNOs to move from one to the other, including the need for appropriate IT systems, credit checks and restrictions imposed by or agreed with the host MNO.

(202) For the purpose of this Decision, with its previous decisional practice in the mobile telecommunications sector, the Commission concludes that prepaid and postpaid retail mobile telecommunication services are part of the same product market. Where appropriate in this Decision, the Commission has assessed the prepaid and postpaid customer groups separately.

7.1.1.6. SIM-only subscriptions/handset subscriptions

A. *Commission precedent*

(203) In past decisions, the Commission has not segmented the overall retail mobile market based on the content of the subscription i.e. SIM-only or handset subscriptions¹³⁶.

B. *The Notifying Party's views*

(204) The Notifying Party argues that in line with Commission precedent, the Transaction should be assessed on the basis of an overall retail market for

¹³⁵ Commission decision of 11 May 2016 in case M.7612 – *Hutchison 3G UK/Telefonica UK*; Commission decision of 2 July 2014 in case M.7018 – *Telefónica Deutschland/E-Plus*; Commission decision of 28 May 2015 in case M.6992 – *Hutchison 3G UK/Telefónica Ireland*; Commission decision of 1 March 2010 in case M.5650 – *T-Mobile/Orange*; Commission decision of 1 September 2016 in case M.7758 – *Hutchison 3G Italy/WIND/JV*.

¹³⁶ Commission decision of 11 May 2016 in case M.7612 – *Hutchison 3G UK/Telefonica UK*; Commission decision of 2 July 2014 in case M.7018 – *Telefónica Deutschland/E-Plus*; Commission decision of 28 May 2015 in case M.6992 – *Hutchison 3G UK/Telefónica Ireland*; Commission decision of 1 March 2010 in case M.5650 – *T-Mobile/Orange*; Commission decision of 1 September 2016 in case M.7758 – *Hutchison 3G Italy/WIND JV*.

mobile telecommunications services, with no distinction between SIM-only and handset subscriptions.

C. *The Commission's assessment*

(205) The Market Investigation suggested that from both the demand side and supply side, SIM-only and handset subscriptions are generally interchangeable, notwithstanding some differences linked to the need for customers who require handset financing to undergo credit verification¹³⁷.

(206) The Commission therefore concludes that SIM-only and SIM with handset retail mobile subscriptions belong to the same product market.

7.1.1.7. Technology: 2G, 3G, 4G

A. *Commission precedent*

(207) In past decisions, the Commission has not segmented the overall retail mobile market based on network technology i.e. 2G, 3G, 4G¹³⁸.

B. *The Notifying Party's views*

(208) The Notifying Party argues that in line with Commission precedent, the Transaction should be assessed on the basis of an overall retail market for mobile telecommunications services, without segmentation by type of technology used.

C. *The Commission's assessment*

(209) Nothing in the Commission's case file indicates that a departure from the conclusions reached by the Commission in previous cases would be justified.

(210) Therefore, in line with its previous decisions, the Commission concludes that the market for the provision of retail mobile telecommunications services should not be segmented by type of technology.

7.1.1.8. Voice, SMS/MMS and data services

A. *Commission precedent*

(211) In past decisions, the Commission has not segmented the overall retail mobile market based on the type of service offered i.e. voice calls, SMS, MMS, mobile Internet data services)¹³⁹.

B. *The Notifying Party's views*

(212) The Notifying Party argues that in line with Commission precedent, the Transaction should be assessed on the basis of an overall retail market for

¹³⁷ See responses to RFI 24 to distributors of 2 May 2018, questions 18 and 18.1.

¹³⁸ Commission decision of 11 May 2016 in case M.7612 – *Hutchison 3G UK/Telefonica UK*; Commission decision of 2 July 2014 in case M.7018 – *Telefónica Deutschland/E-Plus*; Commission decision of 28 May 2015 in case M.6992 – *Hutchison 3G UK/Telefónica Ireland*; Commission decision of 1 March 2010 in case M.5650 – *T-Mobile/Orange*; Commission decision of 1 September 2016 in case M.7758 – *Hutchison 3G Italy/WIND JV*.

¹³⁹ Commission decision of 11 May 2016 in case M.7612 – *Hutchison 3G UK/Telefonica UK*; Commission decision of 2 July 2014 in case M.7018 – *Telefónica Deutschland/E-Plus*; Commission decision of 28 May 2015 in case M.6992 – *Hutchison 3G UK/Telefónica Ireland*; Commission decision of 1 March 2010 in case M.5650 – *T-Mobile/Orange*; Commission decision of 1 September 2016 in case M.7758 – *Hutchison 3G Italy/WIND JV*.

mobile telecommunications services, including voice, SMS/MMS and data services.

C. *The Commission's assessment*

- (213) In the Netherlands, voice communication, SMS/MMS and data services are generally provided together to end users in the same mobile subscription¹⁴⁰. Moreover, all MNOs and most MVNOs in the Netherlands offer a full range of voice and data services to their customers.
- (214) Therefore, in line with previous decisions, for the purpose of this Decision, the Commission concludes that separate markets should not be defined for the provision of voice, SMS/MMS and data services.

7.1.1.9. Fixed-mobile bundles

A. *Commission precedent*

- (215) In previous decisions, the Commission ultimately left open the question as to whether there exists a market for multiple play bundles that is separate from the markets for each of the components of the bundles¹⁴¹.
- (216) In *Vodafone/Liberty Global/Dutch JV*, the relevant product market was the retail market for mobile telecommunications services¹⁴². The question of whether there were one or more multiple-play markets distinct from the markets for individual underlying telecommunications services was left open, as the transaction raised serious doubts as to its compatibility with the internal market irrespective of the conclusion¹⁴³.

B. *The Notifying Party's views*

- (217) The Notifying Party argues that, irrespective of whether a separate market is deemed to exist for FMC bundles, the Commission should assess the impact on competition of such bundles, with particular respect to the discounts on mobile subscriptions that come with such offers.

C. *The Commission's assessment*

- (218) A number of respondents to the Market Investigation noted the relevance of FMC bundles in the Dutch market¹⁴⁴. However, the results of the Market Investigation were inconclusive as to whether separate markets exist for stand-alone mobile services and mobile services purchased as part of a fixed-mobile bundle.

¹⁴⁰ Since July 2018, KPN no longer supports MMS. T-Mobile has indicated it would cease doing so as of January 2019. Accordingly, the competitive relevance of MMS is in any case already considerably reduced. See <http://www.gsmhelpdesk.nl/nieuws/13869/t-mobile-trekt-in-2019-stekker-uit-mms> (retrieved on 23 July 2018) [ID 2513-19].

¹⁴¹ Commission decision of 4 February 2016 in case M.7637 – *Liberty Global/BASE Belgium*, recital 96; Commission decision of 19 May 2015 in case M.7421 - *Orange/Jazztel*, paras 86 and 91; Commission decision of 20 September 2013 in case M.6990 - *Vodafone/Kabel Deutschland*, para. 261; Commission decision of 3 July 2012 in case M.6584 - *Vodafone/Cable & Wireless*, paras 102-104; Commission decision of 16 June 2011 in case M.5900 - *LGI/KBW*, paras 183-186; Commission decision of 25 January 2010 in case M.5734 - *Liberty Global Europe/Unitymedia*, paras 43-48.

¹⁴² Commission decision of 3 August 2016 in case M.7978 - *Vodafone/Liberty Global/Dutch JV*, para. 74.

¹⁴³ Commission decision of 3 August 2016 in case M.7978 - *Vodafone/Liberty Global/Dutch JV*, para. 108.

¹⁴⁴ See responses to RFI 23 to non-MNOs of 2 May 2018, question C.F.1.

- (219) Approximately half of the distributors responding to the Market Investigation indicate customer switching between the two options, although it is not clear, in particular, whether a price increase of 5-10% would be sufficient to induce customers to switch between stand-alone services and FMC offers¹⁴⁵. Among non-MNOs, 36% consider that customers would not switch from a mobile-only subscription to a fixed-mobile bundle¹⁴⁶. However, explanations provided by the respondents are not conclusive as to the question of whether customers would switch (and how many). In fact, among those which explained their answer, three MVNOs indicate that customers would switch¹⁴⁷. [...] ¹⁴⁸. Two MVNOs indicate that customers would not switch¹⁴⁹. In addition, several respondents identified a segment for customers of stand-alone mobile services¹⁵⁰, which includes, for example, young people¹⁵¹.
- (220) Based on the above, the Commission concludes that a further segmentation of the retail mobile telecommunications market between customers of stand-alone mobile services and customers that purchase mobile services as part of a bundle is not appropriate¹⁵².

7.1.1.10.M2M

A. *Commission precedent*

- (221) An M2M connection is a connection, often wireless, in which human input is not necessarily required. Common examples of M2M include energy metering or a burglar alarm.

B. *The Notifying Party's views*

- (222) The Notifying Party considers that M2M services do not constitute a separate product market but in any event, this question can be left open given the limited activities of TMNL and the fact that Tele2 NL's M2M business is carved-out from the Transaction.

C. *The Commission's assessment*

- (223) The Commission notes that the ACM and other third party research agencies report data on the retail mobile market in the Netherlands excluding M2M services. The Commission notes that the estimates provided by the Notifying

¹⁴⁵ See responses to RFI 24 to distributors of 2 May 2018, questions 29, 29.1, 30 and 30.1.

¹⁴⁶ See responses to RFI 23 to non-MNOs of 2 May 2018, question B.B.2.

¹⁴⁷ Replies by Artium, M7 and Galaxy to RFI 23 to non-MNOs of 2 May 2018, question B.B.2.1 [ID 904, 906, 517].

¹⁴⁸ Reply by [...].

¹⁴⁹ Replies by Voiceworks and Youfone to RFI 23 to non-MNOs of 2 May 2018, question B.B.2.1 [907, 908].

¹⁵⁰ See, among others, reply by KPN to RFI 26, according to which "*Providers do not offer a distinct integrated subscription for mobile and fixed telecommunications services. In case of a mobile price increase, customers are more likely to switch to a different mobile provider than to switch to a combined fixed/mobile subscription with mobile included*"; see VodafoneZiggo's response to RFI27, according to which "*most FMC propositions are offered as separate contracts, with additional benefits for customers combining fixed and mobile products at the same address. Virtually all mobile contracts are consequently mobile-only*" [ID 1175, 2235].

¹⁵¹ See Youfone's response to RFI 23 to non-MNOs of 2 May 2018, question B.B.2.1 [ID 908].

¹⁵² In relation to the existence of a possible market for FMC bundles, considering all bundles (including fixed-fixed combinations) separately, the combined market share of the Parties does not exceed [5-10]%.

Party on overall market size and shares of the Parties and their competitors exclude data on M2M segments.

- (224) The Commission therefore concludes that the overall retail market excludes M2M services.

7.1.1.11. Distribution channel

A. *Commission precedent*

- (225) In *Hutchison 3G UK / Telefonica UK*, the Commission concluded that the relevant market encompassed all types of distribution channels and retailers (i.e. online retailers and different types of offline retailers). However, in view of the important role played in the retail market by independent specialist retailers, in its competitive assessment the Commission took into account the segmentation between direct distribution and independent specialist retailers.

B. *The Notifying Party's views*

- (226) The Notifying Party did not provide any views on the possible segmentation of the market by distribution channel.

C. *The Commission's assessment*

- (227) Nothing on the Commission's case file indicates that a departure from the conclusions reached by the Commission in previous cases would be justified.
- (228) Therefore, in line with its previous decisions, the Commission concludes that the market for the provision of retail mobile telecommunications services should not be segmented according to distribution channel.

7.1.1.12. Conclusion

- (229) In light of the above, the Commission concludes that the relevant product market for the assessment of the Transaction is the market for the retail provision of mobile telecommunications services to both private and business customers (excluding M2M).

7.1.2. *Geographic market definition*

7.1.2.1. Commission precedent

- (230) In its past decisional practice, the Commission has concluded that the market for retail mobile telecommunications services was national in scope. In particular in case M.7978, *Vodafone/Liberty Global/Dutch JV* the Commission concluded that the geographic scope of the relevant product market for the assessment of the transaction was the Netherlands¹⁵³.

7.1.2.2. Notifying Party's views

- (231) In the Form CO, the Notifying Party submits that, in line with the approach taken by the Commission in other cases concerning the retail mobile market in the Netherlands, the Transaction should be assessed on the basis that the geographic market for retail mobile telecommunication services is national in scope and corresponds to the territory of the Netherlands.

¹⁵³ Commission decision of 3 August 2016 in case M.7978 - *Vodafone/Liberty Global/Dutch JV*, paragraph 211.

7.1.2.3. Commission's assessment

- (232) The Commission considers that, there is nothing in the file indicating that it would be appropriate to depart from a national scope of the relevant product market.
- (233) The Commission therefore concludes, that the market for retail mobile telecommunications services is national in scope, that is to say limited to the territory of the Netherlands.

7.1.2.4. Overall conclusion

- (234) In light of the above, in this Decision the Commission assesses the effects of the Transaction with respect to the provision of retail mobile telecommunication services (excluding M2M). The geographic scope of these services is the territory of the Netherlands.

7.2. Wholesale mobile telecommunication services

7.2.1. Wholesale services for access and call origination on mobile network

- (235) On the market for wholesale services for access and call origination, MNOs sell access to their mobile network and the ability to make calls and exchange data traffic. MNOs that own mobile networks constitute the supply side, whereas MVNOs (which do not own a mobile network and thus seek access to one or more of the MNO networks in order to provide their mobile retail services) constitute the demand side of this market. The type of service sold can be different depending on the type of customers. For example, a light MVNO would require more services from the host MNO, compared to a full MVNO, as the former does not own any network infrastructure. MNOs typically provide network access and call origination jointly to MVNOs.

7.2.1.1. Product market definition

A. Commission precedent

- (236) In previous decisions¹⁵⁴, the Commission defined a single wholesale market including both access and call origination services on mobile networks, on the ground that MNOs generally supply these services jointly to MVNOs and that both services are essential for MVNOs to be able to provide retail mobile communication services to end users.
- (237) In the *Telefónica Deutschland/E-Plus* decision, branded resellers were not considered active on the demand-side of the wholesale market. Instead, the Commission considered that sales achieved by branded resellers in the German retail market were to be attributed to the MNO, whose products were distributed by the relevant branded reseller¹⁵⁵.

¹⁵⁴ Commission decision of 2 July 2014 in case M.7018 – *Telefónica Deutschland/E-Plus*, recitals 77 to 79; Commission decision of 28 May 2014 in case M.6992 – *Hutchison 3G UK/Telefónica Ireland*, recital 156; Commission decision of 12 December 2012 in case M.6497 – *Hutchison 3G Austria/Orange Austria*, recitals 61 to 63; Commission decision of 1 March 2010 in case M.5650 – *T-Mobile/Orange*, paragraphs 27 to 30; Commission decision of 27 November 2007 in case M.4947 – *Vodafone/Tele2 Italy/Tele2 Spain*, para. 15.

¹⁵⁵ Commission decision of 2 July 2014 in case M.7018 – *Telefónica Deutschland/E-Plus*, footnote 39 and recital 255.

B. Notifying Party's views

- (238) The Notifying Party concurs with the view of the Commission in its previous decisions that there is a single wholesale market including both access and call origination services on mobile networks. It argues that the Transaction should be assessed on the basis of an overall wholesale market for network access and call origination on mobile networks without segmenting the market by type of service (such as, access and call origination) or by type of MVNO (such as, full MVNOs, light MVNOs or branded resellers).

C. Commission's assessment

- (239) The Commission considers that, consistent with its precedents, the relevant product market is the overall market for wholesale access and call origination services, which enable operators without their own network (MVNOs) to access a network and provide a retail mobile offering.

7.2.1.2. Geographic market definition

A. Commission precedent

- (240) In previous cases, the Commission considered the wholesale market for access and call origination to be national in scope due to regulatory barriers stemming from the fact that licences granted to MNOs are generally national in scope¹⁵⁶. The market investigation in *Vodafone/Liberty Global/Dutch JV* confirmed the validity of this approach for the Dutch market¹⁵⁷.

B. Notifying Party's views

- (241) In line with previous Commission decisions, the Notifying Party submits that the relevant geographic scope of the market for wholesale access and call origination on mobile networks is national, limited to the territory of the Netherlands.

C. Commission's assessment

- (242) Nothing on the Commission's case file indicates that a departure from the conclusions reached by the Commission in previous cases would be justified.
- (243) Therefore, in line with its previous decisions, the Commission concludes that the market for wholesale services for access and call origination on mobile networks is national in scope, that is to say limited to the territory of the Netherlands.

7.2.2. Wholesale market for international roaming

7.2.2.1. Product market definition

A. Commission precedent

- (244) International roaming is a service which allows mobile subscribers to make and receive calls, to send and receive text messages and to use other data services when abroad. To offer this service to their end-users, MNOs conclude wholesale agreements with one another providing access and capacity on

¹⁵⁶ Commission decision of 11 May 2016 in case M.7612 – *Hutchison 3G UK/Telefónica UK*, para. 305; Commission decision of 12 December 2012 in case M.6497 – *Hutchison 3G Austria/Orange Austria*, paras 74 to 77.

¹⁵⁷ Commission decision of 3 August 2016 in case M.7978 – *Vodafone/Liberty Global/ Dutch JV*, para. 189.

mobile networks in the foreign country¹⁵⁸. MNOs select their partner operators based on network coverage, price, network quality and reciprocity. The Commission confirmed that the wholesale market for international roaming comprises both terminating calls and originating calls¹⁵⁹.

- (245) Roaming agreements may be concluded with a preferred foreign operator and in recent years international roaming alliances have been created to facilitate cooperation between MNOs from different countries¹⁶⁰. The roaming agreements are nevertheless not exclusive and MNOs are free to enter into more than one roaming agreement in any given country.
- (246) In previous decisions, the Commission has defined a separate wholesale market for international roaming services, comprising both terminating calls and originating calls¹⁶¹.
- (247) For originating calls while roaming, the foreign or visited mobile network is used to make phone calls when abroad and a wholesale roaming charge is paid by the home network to the visited network. For terminating calls, the call is routed by the home network to the visited mobile network and the home network pays for the international carriage of the call and the normal termination charge to the visited network. Demand for wholesale international roaming services comes first from foreign mobile operators who wish to provide their own customers with mobile services outside their own network and also downstream from subscribers wishing to use their mobile telephones outside their own countries¹⁶².

B. Notifying Party's view

- (248) In the Form CO, the Notifying Party referred to the Commission's previous practice in defining the market in question, without providing any indication that the Commission should depart from its approach.

C. Commission's assessment

- (249) Nothing on the Commission's case file indicates that a departure from the conclusions reached by the Commission in previous cases would be justified.
- (250) Therefore, in line with its previous decisions, the Commission concludes that the relevant product market is the wholesale market for international roaming services, comprising both terminating calls and originating calls.

¹⁵⁸ Commission decision of 1 March 2010 in case M.5650 – *T-Mobile/Orange*, para. 32; Commission decision of 12 December 2012 in case M.6497 - *Hutchison 3G Austria/Orange Austria*, para. 64.

¹⁵⁹ Commission decision of 3 August 2016 in case M.7978 – *Vodafone/Liberty Global/Dutch JV*, para. 202.

¹⁶⁰ Commission decision of 1 March 2010 in case M.5650 – *T-Mobile/Orange*, para. 34.

¹⁶¹ Commission decision of 12 December 2012 in case M.6497 - *Hutchison 3G Austria/Orange Austria*; Commission decision of 1 March 2010 in case M.5650 - *T-Mobile/Orange*.

¹⁶² Commission decision of 2 July 2014 in case M.7018 - *Telefónica Deutschland/E-Plus*; Commission decision of 28 May 2014 in case M.6992 - *Hutchison 3G UK/Telefónica Ireland*; Commission decision of 12 December 2012 in case M.6497 - *Hutchison 3G Austria/Orange Austria*; Commission decision of 1 March 2010 in case M.5650 - *T-Mobile/Orange*.

7.2.2.2. Geographic market definition

A. *Commission precedent*

(251) In previous Commission decisions, the relevant geographic scope of the market for wholesale international roaming was considered national in scope¹⁶³. This is due to the existence of regulatory barriers to offering mobile services. Wholesale international roaming agreements can be concluded only with an MNO which owns an operating licence in a given country and licences do not extend beyond national borders¹⁶⁴. A foreign operator that wants to provide retail services to its customers when they are in the Netherlands must therefore enter into a roaming agreement with one of the four Dutch MNOs. Similarly, Dutch operators wishing to offer retail services to customers outside of the Netherlands must enter into a roaming agreement with an MNO active in a given country¹⁶⁵.

B. *Notifying Party's view*

(252) In the Form CO the Notifying Party referred to the Commission's previous practice in defining the market in question, without providing any arguments that the Commission should depart from its approach.

C. *Commission's assessment*

(253) Nothing on the Commission's case file indicates that a departure from the conclusions reached by the Commission in previous cases would be justified.

(254) In line with its previous decisions, the Commission therefore concludes that the relevant geographic market is national in scope, corresponding to the territory of the Netherlands.

7.2.3. Wholesale markets for mobile and fixed call termination

7.2.3.1. Product market definition

A. *Commission precedent*

(255) Call termination is the service provided by one MNO to another MNO whereby a call originating in the network of the latter is delivered to the user in the network of the former. Call termination allows users of different networks to communicate with one another. MNOs provide call termination services to one another on the basis of interconnection agreements, upstream of the provision of telecommunications services to end-customers¹⁶⁶.

¹⁶³ Commission decision of 1 March 2010 in case M.5650 – T-Mobile/Orange, para. 35; Commission decision of 26 April 2006 in case M.3916 – T-Mobile Austria/Tele.ring, para. 28; Commission decision of 12 December 2012 in case M.6497 – *Hutchison 3G Austria/Orange Austria*, paras 80-81; Commission decision of 3 August 2016 in case M.7978 – *Vodafone/Liberty Global/Dutch JV*, paras 202.

¹⁶⁴ Commission decision of 1 March 2010 in case M.5650 – *T-Mobile/Orange* para. 35; Commission decision of 12 December 2012 in case M.6497 – *Hutchison 3G Austria/Orange Austria*, paras 80-81.

¹⁶⁵ Commission decision of 1 March 2010 in case M.5650 – *T-Mobile/Orange*, para. 36; Commission decision of 12 December 2012 in case M.6497 – *Hutchison 3G Austria/Orange Austria*, para. 68.

¹⁶⁶ Commission decision of 1 March 2010 in case M.5650 – *T-Mobile/Orange*, para. 36; Commission decision of 12 December 2012 in case M.6497 – *Hutchison 3G Austria/Orange Austria*, para. 68.

(256) As established in previous Commission decisions¹⁶⁷, each MNO's network constitutes a separate market for termination because the operator transmitting the call can reach the intended recipient only through the operator of the network to which the recipient is connected. There is thus no substitute for call termination on each individual network. This applies to both mobile and to fixed networks¹⁶⁸.

B. Notifying Party's view

(257) The Notifying Party submits that in line with Commission precedent, that each MNO's network constitutes a separate market for termination.

C. Commission's assessment

(258) Nothing on the Commission's case file indicates that a departure from the conclusions reached by the Commission in previous cases would be justified.

(259) In line with its previous decisions, the Commission therefore concludes that each MNO's network constitutes a separate market for termination.

7.2.3.2. Geographic market definition

A. Commission precedent

(260) In previous Commission decisions, the relevant geographic market for call termination in mobile and fixed networks was considered to be national in scope¹⁶⁹. This results from the regulatory barriers that MNOs face, in particular the national scope of spectrum licences granted by Member States¹⁷⁰.

B. Notifying Party's view

(261) In line with Commission precedent, the Notifying Party submits that the relevant geographic market for call termination in mobile and fixed networks is national in scope.

C. Commission's assessment

(262) Nothing on the Commission's case file indicates that a departure from the conclusions reached by the Commission in previous cases would be justified.

(263) In line with its previous decisions, the Commission therefore concludes that the relevant geographic market is national and corresponds to the territory of the Netherlands.

¹⁶⁷ Commission decision of 27 September 2006 in case M.2803 *Telia/Sonera*, paras 29 and 32; Case Commission decision of 10 June 2005 in M.3806 – *Téléfonica/Cesky*, para. 16; Commission decision of 1 March 2010 in case M.5650 – *T-Mobile/Orange*, para. 37; Commission decision of 12 December 2012 in case M.6497 – *Hutchison 3G Austria/Orange Austria*, para. 69; Commission decision of 3 August 2016 in case M.7978 – *Vodafone/Liberty Global/Dutch JV*, paras 193 and 206.

¹⁶⁸ Commission decision of 10 January 2006 in case M.4035 - *Téléfonica/O2*, para. 10; Commission decision of 10 June 2005 in case M.3806 – *Téléfonica/Cesky*, para. 16; Commission decision of 27 November 2007 in case Case M.4947 – *Vodafone/Tele2 Italy/Tele2 Spain*, para. 13; Commission decision of 1 March 2010 in case M.5650 – *T-Mobile/Orange*, para. 37.

¹⁶⁹ Commission decision of 14 November 2005 in case M.4035 – *Téléfonica/O2*, para. 11; Commission decision of 1 March 2010 in case M.5650 – *T-Mobile/Orange* para. 38; Commission decision of 26 April 2006 in case M.3916 – *T-Mobile Austria/Tele.ring*, para. 22; Commission decision of 12 December 2012 in case M.6497 – *Hutchison 3G Austria/Orange Austria*, para. 80; Commission decision of 3 August 2016 in case M.7978 – *Vodafone/Liberty Global/Dutch JV*, paras 196 and 209.

¹⁷⁰ Commission decision of 20 August 2007 in case M.4748 – *T-Mobile/Orange Netherlands*, para. 21; Commission decision of 1 March 2010 in case M.5650 – *T-Mobile/Orange*, para. 38; Commission decision of 26 April 2006 in case M.3916 – *T-Mobile Austria/Tele.ring*, para. 22.

7.3. Retail and wholesale markets for fixed telecommunication services

7.3.1. Retail market for the supply of fixed internet access services

7.3.1.1. Product market definition

A. Commission precedent

(264) In previous cases concerning fixed communication services, such as the recent *Vodafone/Liberty Global/Dutch JV*, the Commission defined a separate product market consisting of the provision of a fixed telecommunications link enabling customers to access the Internet¹⁷¹. In past decisions, the Commission has considered the retail supply of fixed internet services to constitute a separate market with no further segmentation according to product type (distinguishing narrowband, broadband and dedicated access), and (ii) distribution mode (distinguishing xDSL, fibre, cable) or according to speed or technology¹⁷².

B. Notifying Party's views

(265) The Notifying Party considers that the Transaction should be assessed on the basis that there is an overall retail market for the supply of fixed internet services with no further segmentation being necessary.

C. Commission's assessment

(266) Nothing in the Commission's file suggests that the Commission should depart from its precedents and therefore, the Commission concludes that the relevant product market includes the retail supply of fixed internet services with no further segmentation.

7.3.1.2. Geographic market definition

(267) In line with the approach taken by the Commission in other cases concerning the retail market for the supply of fixed access services¹⁷³, the Notifying Party submits that the relevant geographic market is national in scope and corresponds to the territory of the Netherlands.

(268) The Commission considers that, in line with its previous practice, the relevant geographic market shall be considered to be national in scope and corresponding to the territory of the Netherlands.

7.3.2. Retail supply of fixed telephony services

7.3.2.1. Product market definition

A. Commission precedent

(269) Fixed telephony services comprise the provision of connection services at a fixed location or access to the public telephone network, for the purpose of making and/or receiving calls and related services. In past decisions, the Commission has considered the retail fixed telecommunications services market to constitute a separate market from mobile telecommunications

¹⁷¹ Commission decision of 3 August 2016 in case M.7978 – *Vodafone/Liberty Global/Dutch JV*, para 38.

¹⁷² Commission decision of 3 August 2016 in case M.7978 – *Vodafone/Liberty Global/Dutch JV*, paras 36-38.

¹⁷³ Commission decision of 3 August 2016 in case M.7978 – *Vodafone/Liberty Global/Dutch JV*, para. 40; Commission decision of 4 February 2016 in case M.7637 – *Liberty Global/BASE Belgium*, para. 64.

services¹⁷⁴. In recent decisions concerning the retail market for the supply of fixed telephony services, the Commission considered that VoIP services and traditional telephony services are interchangeable and belong to the same product market.

B. Notifying Party's views

(270) The Notifying Party considers, in line with Commission precedent that the Transaction should be assessed on the basis that there is an overall retail fixed telephony services market, which includes VoIP services.

C. Commission's assessment

(271) Nothing in the file suggests that the Commission should depart from its precedents. Accordingly, the Commission considers that the relevant product market is the market for the provision of fixed telephony services, including VoIP services.

7.3.2.2. Geographic market definition

(272) The Commission has in the past considered that the geographic scope of the retail market for fixed telephony services is national, given the importance of national regulation in the telecommunications sector, the supply of upstream wholesale services on a national basis, and the fact that the pricing policies of telecommunications providers are predominantly national¹⁷⁵.

(273) In line with the approach taken by the Commission in other cases concerning the retail fixed telephony market¹⁷⁶, the Notifying Party considers that the Transaction should be assessed on the basis that the geographic market for retail supply of fixed telephony services is national in scope and corresponds to the territory of the Netherlands.

(274) The Commission considers that in line with its precedents, for the purpose of the present decision, the relevant geographic market is national in scope and consists of the territory of the Netherlands.

7.3.3. Retail supply of television services

7.3.3.1. Product market definition

A. Commission precedent

(275) The market for retail supply of television services concerns the provision of television services to end users or viewers. Television services can consist of packages of: (i) linear TV channels, namely free-to-air channels ("FTA TV") and pay channels ("Pay TV"); and (ii) non-linear services, such as VOD.

(276) In previous cases, the Commission left the product market definition open and did not conclude as to whether: (i) FTA TV and Pay TV services; and (ii) Linear Pay TV and nonlinear Pay TV services, belong to the same product

¹⁷⁴ Commission decision of 3 August 2016 in case M.7978 – *Vodafone/Liberty Global/Dutch JV*, para. 40; Commission decision of 4 February 2016 in case M.7637 – *Liberty Global/BASE Belgium*, para. 64.

¹⁷⁵ Commission decision of 4 February 2016 in case M.7637 – *Liberty Global/BASE Belgium*, para. 71; Commission decision of 19 May 2015 in case M.7421 – *Orange/Jazztel*, para. 24; Commission decision of 20 September 2013 in case M.6990 – *Vodafone/Kabel Deutschland*, para. 137; Commission decision of 29 June 2009 in case M.5532 – *Carphone Warehouse/Tiscali UK*, para. 56.

¹⁷⁶ Commission decision of 3 August 2016 in case M.7978 – *Vodafone/Liberty Global/Dutch JV*, para. 29; Commission decision of 4 February 2016 in case M.7637 – *Liberty Global/BASE Belgium*, para. 73.

market as the transactions did not raise competition concerns under any alternative product market definition considered¹⁷⁷. As regards the distinction between different distribution technologies, and after taking into consideration demand-side substitutability, the Commission considered that the provision of retail Pay TV services through the different distribution technologies (such as cable, DSL, FttH and possibly DTH satellite) belong to the same product market¹⁷⁸.

B. Notifying Party's views

(277) The Notifying Party submits that the relevant market definition may be left open, as the Transaction will not lead to any competition concerns under any possible segmentation of the retail television market.

C. Commission's assessment

(278) The Commission considers that the exact market definition may be left open, as the Transaction does not lead to any competitive concern on the retail market for the provision of television services, regardless of the market segmentation adopted.

7.3.3.2. Geographic market definition

(279) In previous decisions, the Commission has considered that the geographic scope of the market for the retail provision of television services is national since providers of retail television services compete on a nationwide basis¹⁷⁹. In line with previous Commission decisions, the Notifying Party submits that the geographic scope of the market is national and corresponds to the territory of the Netherlands.

(280) The Commission therefore considers that, for the purpose of the present case, the relevant geographic market is national in scope and corresponds to the territory of the Netherlands.

7.3.4. *Retail market for business connectivity services*

7.3.4.1. Product market definition

A. Commission precedent

(281) The product market includes fixed telecommunications services, which large businesses, enterprises and public sector customers purchase to provide data connectivity between multiple sites¹⁸⁰.

B. Notifying Party's views

(282) In line with the approach taken by the Commission in other cases¹⁸¹, the Notifying Party considers that retail business connectivity services constitute a separate product market.

¹⁷⁷ Commission decision of 3 August 2016 in case M.7978 – *Vodafone/Liberty Global/Dutch JV*, paras 53; Commission decision of 30 May 2018 in case M.7000 – *Liberty Global/Ziggo*, paras 107-110.

¹⁷⁸ Commission decision of 3 August 2016 in case M.7978 – *Vodafone/Liberty Global/Dutch JV*, para. 54; Commission decision of 30 May 2018 in case M.7000 – *Liberty Global/Ziggo*, para. 113.

¹⁷⁹ Commission decision of 30 May 2018 in case M.7000 – *Liberty Global/Ziggo*, para. 118; Commission decision of 15 April 2016 in case M.6880 – *Liberty Global/Virgin Media*, para. 54.

¹⁸⁰ Commission decision of 3 August 2016 in case M.7978 – *Vodafone/Liberty Global/Dutch JV*, para. 113.

C. *The Commission's assessment*

- (283) Nothing in the file suggests that the Commission should depart from its precedents and, therefore, the Commission considers that the relevant product market is the retail market for business connectivity services.

7.3.4.2. Geographic market definition

- (284) In line with previous Commission decisions¹⁸², the Notifying Party submits that the geographic scope of the retail market for business connectivity services is national and corresponds to the territory of the Netherlands.
- (285) The Commission, in line with its precedents, considers that the relevant geographic market is national in scope and corresponds to the territory of the Netherlands.

7.3.5. *Wholesale leased lines*

7.3.5.1. Product market definition

A. *Commission precedent*

- (286) Wholesale leased lines are part-circuits that allow communications providers to connect their own networks to end user sites for the supply of business connectivity services. In addition, wholesale leased lines are an input for the provision of retail mobile services. In previous decisions, the Commission considered that the wholesale market for leased lines could be further segmented between trunk and terminating segments but ultimately left the market definition open¹⁸³.

B. *Notifying Party's views*

- (287) The Notifying Party submits that the relevant market definition may be left open, as the Transaction will not lead to any competition concerns under any possible segmentation of the wholesale market for leased lines.

C. *The Commission's assessment*

- (288) The Commission considers that the exact market definition may be left open, as the Transaction does not lead to any competitive concern on the market for the wholesale provision of leased lines, regardless of the market segmentation adopted.

7.3.5.2. Geographic market definition

- (289) In line with previous Commission decisions¹⁸⁴, the Notifying Party submits that the geographic scope of the wholesale market for leased lines is national and corresponds to the territory of the Netherlands.

¹⁸¹ Commission decision of 3 August 2016 in case M.7978 – *Vodafone/Liberty Global/Dutch JV*, para. 127; Commission decision of 3 July 2012 in case M.6584 – *Vodafone/Cable & Wireless*, paras 8-9.

¹⁸² Commission decision of 3 August 2016 in case M.7978 – *Vodafone/Liberty Global/Dutch JV*, para. 130; Case M.6584 – *Vodafone/Cable & Wireless*, para. 10.

¹⁸³ Commission decision of 4 February 2016 case M.7637 – *Liberty Global/BASE Belgium*, para. 146; Commission decision of 14 April 2014 in case M.7109 – *Deutsche Telecom/GTS*, para. 70.

¹⁸⁴ Commission decision of 3 August 2016 in case M.7978 – *Vodafone/Liberty Global/Dutch JV*, para. 244; Commission decision of 14 April 2014 in case M.7109 – *Deutsche Telecom/GTS*, para. 80; Commission decision of 3 July 2012 in case M.6584 – *Vodafone/Cable & Wireless*, para. 31.

- (290) The Commission, in line with its precedents, considers that the relevant geographic market is national in scope and corresponds to the territory of the Netherlands.

7.3.6. *Wholesale provision of domestic call transit services on fixed networks*

7.3.6.1. Product market definition

A. *Commission precedent*

- (291) Domestic call transit on a fixed network is a wholesale service provided by a third party where there is no direct connection between originating communication providers and terminating communication providers.
- (292) In previous decisions, the Commission has found that there is a separate market for the wholesale provision of domestic call transit services on fixed networks, distinct from the international wholesale market for voice carrier services¹⁸⁵. The Commission recently reiterated this approach, indicating that further division of this product market is not necessary¹⁸⁶.

B. *Notifying Party's views*

- (293) In the Form CO the Notifying Party referred to the Commission's previous practice in defining the market in question, without providing any indication that the Commission should depart from its approach.

C. *Commission's assessment*

- (294) Nothing in the file suggests that the Commission should depart from its precedents and, therefore, the Commission considers that the relevant product market is the market for domestic call transit on a fixed network.

7.3.6.2. Geographic market definition

- (295) In line with the Commission's previous practice¹⁸⁷, the Notifying Party considers that the geographic scope of the wholesale market for call transit services on fixed networks is national and corresponds to the territory of the Netherlands. This is primarily due to regulatory barriers as the geographical scope of licences is in principle limited to areas which do not extend beyond the borders of a Member State.
- (296) In line with its previous decisions, the Commission considers that the relevant geographic market is national in scope, and corresponds to the territory of the Netherlands.

7.3.7. *Wholesale markets for mobile and fixed call termination*

7.3.7.1. Product market definition

A. *Commission precedent*

- (297) Call termination is the service provided by an MNO to another MNO whereby a call originating in the network of the latter is delivered to the user in the

¹⁸⁵ Commission decision of 14 April 2014 in case M.7109 – *Deutsche Telecom/GTS*, para. 77; Commission decision of 3 July 2012 in case M.6584 – *Vodafone/Cable & Wireless*, para. 26.

¹⁸⁶ Commission decision of 3 August 2016 in case M.7978 – *Vodafone/Liberty Global/Dutch JV*, para. 224.

¹⁸⁷ Commission decision of 3 August 2016 in case M.7978 – *Vodafone/Liberty Global/Dutch JV*, para. 226; Commission decision of 4 February 2016 in case M.7637 – *Liberty Global/BASE Belgium*, para. 127; Commission decision of 14 April 2014 in case M.7109 – *Deutsche Telecom/GTS*, para. 80.

network of the former. Call termination allows users of different networks to communicate with one another. MNOs provide call termination services to one another on the basis of interconnection agreements, upstream of the provision of telecommunications services to end-customers¹⁸⁸.

- (298) As established in previous Commission decisions¹⁸⁹, each MNO's network constitutes a separate market for termination because the operator transmitting the call can reach the intended recipient only through the operator of the network to which the recipient is connected. There is thus no substitute for call termination on each individual network. This applies to both mobile and to fixed networks¹⁹⁰,

B. Notifying Party's views

- (299) In the Form CO the Notifying Party referred to the Commission's previous practice in defining the market in question, without providing any indication that the Commission should depart from its approach.

C. Commission's assessment

- (300) Consistent with its approach in previous cases, the Commission considers that each MNO's network is a separate relevant product market for the provision of call termination services.

7.3.7.2. Geographic market definition

- (301) In previous Commission decisions, the relevant geographic market for call termination in mobile and fixed networks was considered national in scope¹⁹¹. This results from the regulatory barriers that MNOs face, in that the geographical scope of the licences correspond to the national territory of the Member State granting it¹⁹².
- (302) Consistent with its approach in its previous cases, the Commission considers that the relevant geographic market is national in scope and corresponds to the territory of the Netherlands.

¹⁸⁸ Commission decision of 1 March 2010 in case M.5650 – *T-Mobile/Orange*, para. 36; Commission decision of 12 December 2012 in case M.6497 – *Hutchison 3G Austria/Orange Austria*, para. 68.

¹⁸⁹ Commission decision of 27 September 2006 in case M.2803 – *Telia/Sonera*, paras 29 and 32; Commission decision of 10 June 2005 in case M.3806 – *Téléfonica/Cesky*, para. 16; Commission decision of 1 March 2010 in case M.5650 – *T-Mobile/Orange*, para. 37; Commission decision of 12 December 2012 in case M.6497 – *Hutchison 3G Austria/Orange Austria*, para. 69; Commission decision of 3 August 2016 in case M.7978 – *Vodafone/Liberty Global/Dutch JV*, paras 193 and 206.

¹⁹⁰ Commission decision of 10 January 2006 in case M.4035 – *Téléfonica/O2*, para. 10; Commission decision of 10 June 2005 in case M.3806 – *Téléfonica/Cesky*, para. 16; Commission decision of 27 November 2007 in case M.4947 – *Vodafone/Tele2 Italy/Tele2 Spain*, para. 13; Commission decision of 1 March 2010 in case M.5650 – *T-Mobile/Orange*, para. 37.

¹⁹¹ Commission decision of 10 January 2006 in case M.4035 – *Téléfonica/O2*, para. 11; Commission decision of 1 March 2010 in case M.5650 – *T-Mobile/Orange*, para. 38; Commission decision of 26 April 2006 in case M.3916 – *T-Mobile Austria/Tele.ring*, para. 22; Commission decision of 12 December 2012 in case M.6497 – *Hutchison 3G Austria/Orange Austria*, para. 80; Commission decision of 3 August 2016 in case M.7978 – *Vodafone/Liberty Global/Dutch JV*, paras 196 and 209.

¹⁹² Commission decision of 20 August 2007 in case M.4748 – *T-Mobile/Orange Netherlands*, para. 21; Commission decision of 1 March 2010 in case M.5650 – *T-Mobile/Orange*, para. 38; Commission decision of 26 April 2006 in case M.3916 – *T-Mobile Austria/Tele.ring*, para. 22.

7.3.8. Wholesale termination and hosting calls to non-geographic numbers

7.3.8.1. Product market definition

A. Commission precedent

(303) Voice calls can be made to both geographic numbers and non-geographic numbers. A non-geographic number is a number associated with a country, but not to any single geographic location within that country. The non-geographic number services are less frequently used than standard services and are typically used for free and paid information services (e.g. for helpdesks, subscription services, television voting lines, etc.). In the Netherlands, numbers starting with 0800 or 0900 are the most common non-geographic numbers.

(304) In previous decisions, the Commission considered that there is an overall wholesale market for termination and hosting of calls to non-geographic numbers, without it being necessary to consider further possible segmentations¹⁹³.

B. Notifying Party's views

(305) In the Form CO the Notifying Party referred to the Commission's previous practice in defining the market in question, without providing any indication that the Commission should depart from its approach.

C. The Commission's assessment

(306) In line with its precedents, the Commission considers that the relevant product market is the wholesale market for termination and hosting of calls to non-geographic numbers.

7.3.8.2. Geographic market definition

(307) In line with previous decisional practice of the Commission¹⁹⁴, the Notifying Party considers that the geographic scope of the wholesale market for termination and hosting of calls to nongeographic numbers is national and corresponds to the territory of the Netherlands.

(308) Consistent with the approach in its previous cases, the Commission considers that the relevant geographic market is national in scope and corresponds to the territory of the Netherlands.

7.3.9. Global telecommunication services

7.3.9.1. Product market definition

A. Commission precedent

(309) Global telecommunications services ("GTS") are telecommunications services linking a number of different customer locations, generally in at least two different continents and across a larger number of different countries. They are generally purchased by multinational companies operating in different

¹⁹³ Commission decision of 3 August 2016 in case M.7978 – *Vodafone/Liberty Global/Dutch JV*, paras 216; Commission decision of 4 February 2016 in case M.7637 – *Liberty Global/BASE Belgium*, paras 137 – 139; Commission decision of 3 July 2012 in case M.6584 – *Vodafone/Cable & Wireless*, paras 58- 62.

¹⁹⁴ Commission decision of 3 August 2016 in case M.7978 – *Vodafone/Liberty Global/Dutch JV*, para. 219; Commission decision of 4 February 2016 in case M.7637 – *Liberty Global/BASE Belgium*, para. 142; Commission decision of 3 July 2012 in case M.6584 – *Vodafone/Cable & Wireless*, paras 17-18.

countries and continents. GTS provide customers with package solutions including virtual private networks ("VPN") for both voice and data services and other advanced functionalities¹⁹⁵.

- (310) The GTS are supplied at retail level and wholesale level. In the latter case, they can also be referred to as 'international carrier services'. Wholesale GTS comprise: (i) the lease of transmission capacity; and (ii) the provision of related services to third-party telecommunication traffic carriers and service providers and are an input for retail GTS.
- (311) In *Vodafone/Cable&Wireless*, the Commission considered a possible distinction between retail GTS and international carrier services and between the lease of transmission capacity and the provision of services to third-party carriers, but ultimately left open the exact product market definition¹⁹⁶.

B. Notifying Party's views

- (312) The Notifying Party submits that the exact market definition may be left open, as the Transaction does not raise any competitive concern under any plausible market definition due to the Parties negligible activities on that market.

C. The Commission's assessment

- (313) Considering that the assessment of the Transaction will remain the same, regardless of the product market definition adopted, the Commission considers that such definition may be left open for the purposes of the present case.

7.3.9.2. Geographic market definition

- (314) In past decisions, the Commission has considered the GTS market(s) to be global in scope, although it ultimately left open the precise definition of the geographic scope of this market¹⁹⁷. The Commission considered that from a demand-side perspective, retail GTS customers are mainly multinational companies active internationally. It also considered that most suppliers have an international portfolio of customers and are in a position of providing GTS on a worldwide basis¹⁹⁸.
- (315) The Notifying Party submits that the exact definition of the geographic market can be left open, as the Transaction does not raise any competitive concern under any plausible market definition.
- (316) The Commission considers that the exact scope of the relevant geographic market may be left open as the assessment of the Transaction will remain the same, regardless of the definition adopted.

¹⁹⁵ Commission decision of 14 April 2014 in case M.7109 – *Deutsche Telecom/GTS*, paras 10-11.

¹⁹⁶ Commission decision of 3 July 2012 in case M.6584 – *Vodafone/Cable & Wireless*, para. 33.

¹⁹⁷ Commission decision of 14 April 2014 in case M.7109 – *Deutsche Telecom/GTS*, para. 18; Commission decision of 3 July 2012 in case M.6584 – *Vodafone/Cable & Wireless*, para. 34.

¹⁹⁸ Commission decision of 14 April 2014 in case M.7109 – *Deutsche Telecom/GTS*, para. 17.

7.3.10. Retail global business connectivity services

7.3.10.1. Product market definition

A. Commission precedent

(317) The product market includes the fixed telecommunications services that large businesses, enterprises and public sector customers purchase to provide data connectivity between multiple sites¹⁹⁹.

B. Notifying Party's views

(318) In line with the approach taken by the Commission in other cases²⁰⁰, the Notifying Party considers that retail global business connectivity services constitute a separate product market.

C. The Commission's assessment

(319) Consistent with the approach in its previous cases, the Commission considers that the relevant product market is the market for global business connectivity services.

7.3.10.2. Geographic market definition

(320) In line with previous Commission decisions²⁰¹, the Notifying Party submits that the geographic scope of the retail market for global business connectivity services is national and corresponds to the territory of the Netherlands.

(321) Consistent with the approach in its previous cases, the Commission considers that the relevant geographic market is national and corresponds to the territory of the Netherlands.

7.3.11. Retail supply of fixed multiple play services

7.3.11.1. Product market definition

A. Commission precedent

(322) The term "multiple-play" refers to offers comprising two or more of the following services provided to retail consumers: mobile telecommunications services, fixed telephony, fixed internet access, and television services. Multiple-play comprising two, three or four of these services is referred to as dual-play, triple-play and quadruple- or "quad"- play respectively.

(323) Multiple-play comprising any combination of two or more fixed services without a mobile component is referred to as "fixed multiple-play". Multiple-play comprising one or more fixed services in combination with a mobile component (including either voice or data, or both together) is referred to as "fixed-mobile multiple-play". Fixed-mobile multiple-play may involve a single mobile subscription (SIM card) or more than one mobile subscription combined with the fixed subscription.

¹⁹⁹ Commission decision of 3 August 2016 in case M.7978 – *Vodafone/Liberty Global/Dutch JV*, para. 113.

²⁰⁰ Commission decision of 3 August 2016 in case M.7978 – *Vodafone/Liberty Global/Dutch JV*, para. 127; Commission decision of 3 July 2012 in case M.6584 – *Vodafone/Cable & Wireless*, paras 8-9.

²⁰¹ Commission decision of 3 August 2016 in case M.7978 – *Vodafone/Liberty Global/Dutch JV*, para. 130; Commission decision of 3 July 2012 in case M.6584 – *Vodafone/Cable & Wireless*, para. 10.

- (324) In previous decisions, the Commission ultimately left open the question as to whether there exists a market for multiple-play bundles that is separate from the markets for each of the components of the bundles²⁰².

B. Notifying Party's view

- (325) In the Notifying Party's view, the exact definition of the potential product market can be left open, as the Transaction will not raise any competitive concerns under any plausible definition of multiple-play markets or market segments. Both TMNL and Tele2 NL have a marginal number of fixed-multiple bundles in their portfolio, which combined represent an insignificant share of the total number of fixed-multiple bundles available on the Dutch market.

C. Commission assessment

- (326) Considering that the assessment of the Transaction will remain the same, regardless of the product market definition adopted, the Commission considers that such definition may be left open for the purposes of the present case.

7.3.11.2. Geographic market definition

- (327) In previous decisions, the Commission considered that the geographic scope of any possible retail market for multiple-play would be national, since the components of the multiple-play bundles are offered individually at national level and the bundling of the services would not change the geographic scope of the components. It nevertheless ultimately left the question of the exact geographic delineation of the possible multiple-play market open²⁰³.
- (328) In line with the Commission's previous decisions, the Notifying Party submits that the geographic scope of any potential retail market for multiple-play services is national and corresponds to the territory of the Netherlands.
- (329) The Commission therefore considers, for the purpose of this Decision, that the relevant geographic market is national and corresponds to the territory of the Netherlands.

7.4. Affected markets

7.4.1. Horizontally affected markets

- (330) The Parties have horizontally overlapping activities in a number of different markets. The only horizontally affected market arising from the Transaction is the market for retail mobile telecommunication services in the Netherlands.
- (331) The Commission notes that the wholesale market for access and call origination on public mobile telephone networks in the Netherlands is not horizontally affected as the Parties' combined market share is below 20%. Equally, none of the retail and wholesale markets for fixed telecommunication services are horizontally affected, as the Parties' combined market share remains below 20%²⁰⁴.

²⁰² Commission decision of 3 August 2016 in case M.7978 – *Vodafone/Liberty Global/Dutch JV*, para. 112.

²⁰³ Commission decision of 3 August 2016 in case M.7978 – *Vodafone/Liberty Global/Dutch JV*, para. 112; Commission decision of 30 May 2018 in case M.7000 – *Liberty Global/Ziggo*, paras 152-153.

²⁰⁴ The Commission has received one complaint from the broadcaster RTL Nederland regarding the merged entity's position in the market for the retail supply of fixed internet access services as well as its

7.4.2. Vertically affected markets

- (332) The Parties have vertically related activities in a number of different markets. Table 2 sets out the market shares of the Parties in each of the vertically affected markets.
- (333) The Commission notes that there are a number of vertical relationships between the Parties that do not result in affected markets as the Parties' combined market share on each of the upstream and downstream markets is below 30%, including: (i) the upstream market for leased lines and the downstream market for business connectivity services; and (ii) the wholesale market for access and call origination on public mobile telephone networks and the downstream retail mobile market²⁰⁵.

Table 2 – Overview of vertically affected markets

		Relevant market	Combined market share
Wholesale market for international roaming outside the Netherlands	Upstream	Wholesale market for international roaming in markets where DTAG is active (AT, HR, CZ, DE, GR, HU, PL, RO, SK)	DTAG > 30% in certain markets
	Downstream	Dutch retail mobile market	TMNL+Tele2 NL < 30%
Wholesale market for International roaming in the Netherlands	Upstream	Wholesale market for international roaming in the Netherlands	TMNL+Tele2 NL < 30%
	Downstream	Retail mobile markets where DTAG is active (AT, HR, CZ, DE, GR, HU, PL, RO, SK)	DTAG >30% in all markets, except PL and RO.

potential future position in the provision of internet access services provided via 5G [ID 3133]. RTL Nederland expressed its concerns that the distribution of its audio-visual content via OTT is increasing and that the merged entity provides the necessary internet connection for this service and could therefore act as gatekeeper to RTL's disadvantage. Given: (i) the unsubstantiated and speculative nature of the complaint; and (ii) the Parties' limited market shares in the market for the retail supply of fixed internet access, the Commission concludes that anti-competitive effects are unlikely to arise in this market. Therefore, the Commission has not carried out an in-depth assessment of the effects of the Transaction in this non-affected market.

²⁰⁵

Despite the market not being affected, [...] has raised vertical foreclosure concerns. These concerns are assessed below in Section 8.3.7.1.

		Relevant market	Combined market share
Wholesale market for call termination for customers from the Netherlands	Upstream	Wholesale market for termination in markets where DTAG is active (AT, HR, CZ, DE, GR, HU, PL, RO, SK)	DTAG - 100%
	Downstream	Dutch retail mobile market	TMNL+Tele2 NL < 30%
Wholesale market for call termination for customers from outside the Netherlands	Upstream	Wholesale market for call termination on TMNL and Tele2 NL networks	The Parties have 100% on the respective networks
	Downstream	Retail mobile markets and retail fixed markets in countries where DTAG is active (AT, HR, CZ, DE, GR, HU, PL, RO, SK)	DTAG > 30% in all markets, except PL and RO.

- (334) As can be seen from Table 2, a number of vertically affected markets arise as a result of the Transaction. The Commission does not consider these markets further in the Decision however for the following reasons.
- (335) **Wholesale markets for international roaming:** in the Netherlands and in the EEA markets where DTAG is active, no significant impediment to effective competition is likely to arise for the following reasons.
- (336) First, as long as the market for roaming services in the Netherlands is concerned, Tele2 NL does not provide any inbound roaming services, due to the lack of a 2G and 3G network. The Transaction, therefore, would not result in any structural change of the market.
- (337) Second, the market for wholesale international roaming is subject to sector-specific Union regulation. Under the Roaming Regulation²⁰⁶, MNOs: (i) must meet all reasonable requests for wholesale roaming access; and (ii) are bound by caps on the wholesale prices that they can charge to their roaming customers. In addition, retail international roaming charges have been abolished. It follows that the merged entity would not be able to raise wholesale international roaming prices or refuse reasonable requests for call termination from foreign mobile providers.

²⁰⁶

Regulation (EU) No 531/2012 of the European Parliament and of the Council of 13 June 2012 on roaming on public mobile communications networks within the Union (OJ L 172, 30.6.2012, pp. 10–35 (the "Roaming Regulation"); amended by Regulation (EU) No 2015/2120 of the European Parliament and the Council of 25 November 2015 laying down measures concerning open internet access and amending Directive 2002/22/EC on universal service and users' rights relating to electronic communications networks and services and Regulation (EU) No 531/2012 on roaming on public mobile communications networks within the Union, OJ L 310, 26.11.2015, pp. 1–18, amended by Regulation (EU) No 2017/920 of the European Parliament and the Council of 17 May 2017 amending Regulation (EU) No 531/2012 as regards rules for wholesale roaming markets.

- (338) Third, the Market Investigation did not raise specific concerns regarding wholesale roaming services.
- (339) **Wholesale markets for mobile and fixed call termination:** in the Netherlands and in the EEA markets where DTAG is active, no significant impediment to effective competition is likely to arise, as these markets are also subject to sector-specific regulation. Pursuant to the Framework Directive for electronic communications networks and services²⁰⁷, national regulatory authorities must ensure that all users derive maximum benefit in terms of choice, price and quality of service and to ensure that there is no distortion or restriction of competition. Accordingly, national authorities scrutinize rates set by MNOs for call termination on both their fixed and mobile lines²⁰⁸. National authorities will continue to ensure that the mobile and fixed termination rates remain reasonable and non-discriminatory.
- (340) Therefore, the Commission considers that the Transaction would not significantly impede effective competition on the affected wholesale markets for mobile and fixed call termination services, given that such markets are subject to the full *ex-ante* regulation and will continue to be so after the Transaction. Therefore, the wholesale markets for call terminations services are not further discussed in this Decision.

8. COMPETITIVE ASSESSMENT

- (341) In this Section, the Commission carries out its competitive assessment with respect to the non-coordinated and coordinated horizontal effects of the Transaction in the horizontally affected market identified in Section 7.4.1. To this aim, Section 8.1 discusses the relevant legal test for the assessment of horizontal non-coordinated and coordinated effects. Section 8.2 describes the market structure and the competitive parameters in the affected market. Section 8.3 and Section 8.4 assess, respectively, the non-coordinated and coordinated effects of the Transaction in the market for retail mobile telecommunications services in the Netherlands. Section 8.5 assesses the efficiencies of the Transaction.

8.1. Legal test

- (342) Under Article 2(2) and (3) of the Merger Regulation, the Commission must assess whether a proposed concentration would significantly impede effective competition in the internal market or in a substantial part of it, in particular through the creation or strengthening of a dominant position. In this respect, a merger may entail horizontal and/or vertical effects²⁰⁹.
- (343) Horizontal effects are those deriving from a concentration where the undertakings concerned are actual or potential competitors of each other in one or more of the relevant markets concerned. The Commission appraises such

²⁰⁷ 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 ("Framework Directive"), as amended, at Article 8(2).

²⁰⁸ In line with Article 15 of the Framework Directive.

²⁰⁹ Vertical effects are those deriving from a concentration where the undertakings concerned are active on different or multiple levels of the supply chain. A concentration may involve both types of effects.

effects in accordance with the guidance set out in the relevant notice, that is to say the Horizontal Merger Guidelines²¹⁰.

- (344) The Horizontal Merger Guidelines describe horizontal non-coordinated effects as follows: *"A merger may significantly impede effective competition in a market by removing important competitive constraints on one or more sellers who consequently have increased market power. The most direct effect of the merger will be the loss of competition between the merging firms. For example, if prior to the merger one of the merging firms had raised its price, it would have lost some sales to the other merging firm. The merger removes this particular constraint. Non-merging firms in the same market can also benefit from the reduction of competitive pressure that results from the merger, since the merging firms' price increase may switch some demand to the rival firms, which, in turn, may find it profitable to increase their prices. The reduction in these competitive constraints could lead to significant price increases in the relevant market."*²¹¹
- (345) Generally, a merger giving rise to such non-coordinated effects would significantly impede effective competition by creating or strengthening of the dominant position of a single firm, one which, typically, would have an appreciably larger market share than the next competitor post-merger.
- (346) However, under the substantive test set out in Article 2(2) and (3) of the Merger Regulation, mergers that do not lead to the creation or the strengthening the dominant position of a single firm may create competition concerns in oligopolistic markets. Indeed, the Merger Regulation recognises that in oligopolistic markets, it is all the more necessary to maintain effective competition²¹². This is in view of the more significant consequences that mergers may have on such markets. For this reason, the Merger Regulation provides that: *"under certain circumstances, concentrations involving the elimination of important competitive constraints that the merging parties had exerted upon each other, as well as a reduction of competitive pressure on the remaining competitors, may, even in the absence of a likelihood of coordination between the members of the oligopoly, result in a significant impediment to effective competition"*²¹³.
- (347) Paragraph 24 of the Horizontal Merger Guidelines, which sets out the economic rationale underlying non-coordinated anti-competitive effects in horizontal mergers, states that a merger may result in a SIEC in a market by removing important competitive constraints on one or more firms. This paragraph furthermore clarifies that the most direct effect of the merger will be the loss of competition between the merging firms. In order to assess whether a notified merger will result in a SIEC on the basis of non-coordinated effects, the Commission therefore needs to analyse primarily the extent of the

²¹⁰ Guidelines on the assessment of horizontal mergers under the Council Regulation on the control of concentrations between undertakings ("Horizontal Merger Guidelines"), OJ C 31,05.02.2004.

²¹¹ Horizontal Merger Guidelines, paragraph 24

²¹² Merger Regulation, recital 25.

²¹³ Merger Regulation, recital 25. Similar wording is also found in paragraph 25 of the Horizontal Merger Guidelines. See also Commission decision of 2 July 2014 in case M.7018 – *Telefónica Deutschland/E-Plus*, recital 113; Commission decision of 28 May 2014 in case M.6992 – *Hutchison 3G UK/Telefónica Ireland*, recital 179; Commission decision of 12 December 2012 in case M.6497 – *Hutchison 3G Austria/Orange Austria*, recital 88.

competitive constraint imposed pre-merger by each of the merging parties on each other. The following sentence of paragraph 24 of the Horizontal Merger Guidelines clarifies that the removal of the rivalry between the parties may have consequences also on the other players, who may find it profitable to increase their prices. The ultimate effect would thus typically be price increases by the merging parties but also by competitors in the relevant market.

- (348) The Commission carries out an overall assessment of the likely effects of the Transaction arising from the elimination of important competitive constraints, taking into consideration the overall body of evidence in its file. The conclusion that a transaction leads to a significant impediment of effective competition is reached taking into account the degree to which all the relevant factors, including the ones listed in paragraphs 27 - 38 of the Horizontal Merger Guidelines, are present in the case under consideration.
- (349) The Horizontal Merger Guidelines list a number of factors which may influence whether or not significant horizontal non-coordinated effects are likely to result from a merger. However, not all of these factors need to be present to make significant non-coordinated effects likely and it is not an exhaustive list²¹⁴.
- (350) Among the factors listed in the Horizontal Merger Guidelines are included: the large market shares of the merging firms; the fact that the merging firms are close competitors; the limited possibilities for customers to switch suppliers; the fact that the merged entity would be able to hinder expansion by competitors; and the fact that the merger would eliminate an important competitive force²¹⁵.
- (351) Specifically, as regards closeness of competition, the Horizontal Merger Guidelines clearly provide for a relative approach to the question of closeness of competition. According to paragraph 28 of the Horizontal Merger Guidelines, the higher the degree of substitutability between the merging firms' products, the more likely it is that the merging firms will raise prices significantly. In this regard, the Commission needs to verify whether the rivalry between the parties has been an important source of competition on the market²¹⁶. The same concept is set out in paragraph 17 of the Horizontal Merger Guidelines, according to which a merger may raise competition concerns based on: "*the extent to which the products of the merging parties are close substitutes*". Both wordings set out a positive correlation between the degree of substitutability between the products of the merging parties and the likelihood and seriousness of the competition concerns raised by the proposed merger. It follows that if the merging parties' products are each other's closest substitutes, the competition concerns may be particularly strong.
- (352) However, it is not required that the merging parties' products are each other's closest substitutes for competition concerns to arise. Significant anti-competitive effects (e.g. in the form of price increases) may also arise if a substantial number of customers view the products offered by the parties as their first and second choices²¹⁷. That is, it is not required that the majority of

²¹⁴ Horizontal Merger Guidelines, paragraph 26.

²¹⁵ Horizontal Merger Guidelines, paragraphs 27 *et seq.*

²¹⁶ Horizontal Merger Guidelines, paragraph 28.

²¹⁷ Horizontal Merger Guidelines, paragraph 28.

the customers having one of the parties as their first best option, consider the other merging party as the second best option. The fact that for certain customers substitutability is lower between the products of the merging parties than between each of the merging parties' products and those supplied by other competitors, is not sufficient, in itself, to discount the possibility that in an oligopolistic market a transaction can give rise to a significant impediment to effective competition in the internal market²¹⁸.

- (353) As regards the elimination of an important competitive force, according to the Horizontal Merger Guidelines, some firms have more of an influence on the competitive process than their market share would suggest. A merger involving such a firm may change the competitive dynamics in a significant anticompetitive way, in particular in a market that is already concentrated²¹⁹. In this respect, paragraph 37 of the Horizontal Merger Guidelines refers to the example of a firm that is a recent entrant on the market, and is expected to exert significant competitive pressure in the future. There may, however, also be other situations where a merger may lead to significant non-coordinated effects by removing an important competitive force.
- (354) Finally, the Horizontal Merger Guidelines describe a number of factors, which could counteract the harmful non-coordinated effects of the merger on competition, that is, the likelihood of buyer power, entry, efficiencies and the fact that one of the merging parties is a failing firm ("failing firm defence").
- (355) As regards the failing firm defence, the basic requirement for the Commission to accept this argument is that the deterioration of the competitive structure that follows the merger cannot be said to be caused by the merger: this will arise where the competitive structure of the market would deteriorate to at least the same extent in the absence of the merger²²⁰. According to the Horizontal Merger Guidelines, the following three criteria are especially relevant for the application of a failing firm defence. First, the allegedly failing firm would in the near future be forced out of the market because of financial difficulties if not taken over by another undertaking. Second, there is no less anti-competitive alternative purchase than the notified merger. Third, in the absence of a merger, the assets of the failing firm would inevitably exit the market.
- (356) A merger in a concentrated market may also significantly impede effective competition due to horizontal coordinated effects where, through the creation or the strengthening of a collective dominant position, it increases the likelihood that firms are able to coordinate their behaviour and raise prices, even without entering into an agreement or resorting to a concerted practice within the meaning of Article 101 TFEU. A merger may also make coordination easier, more stable or more effective for firms that were already coordinating before the merger, either by making the coordination more robust or by permitting firms to coordinate on even higher prices²²¹.
- (357) To assess whether a merger gives rise to horizontal coordinated effects, the Commission should examine, first, whether it would be possible to reach terms

²¹⁸ Commission decision of 12 December 2012 in case M.6497 – *Hutchison 3G Austria/Orange Austria*, recital 176.

²¹⁹ Horizontal Merger Guidelines, paragraph 37.

²²⁰ Horizontal Merger Guidelines, paragraph 89.

²²¹ Horizontal Merger Guidelines, paragraph 39

of coordination and, second, whether the coordination is likely to be sustainable²²².

- (358) As regards the possibility of reaching terms of coordination, coordination is more likely to emerge in markets where it is relatively simple to reach a common understanding on the terms of coordination²²³. Coordination may take various forms, including keeping prices above the competitive level, or dividing the market, for instance by customer characteristics or by allocating contracts in bidding markets²²⁴.
- (359) As regards the sustainability of coordination, three conditions are necessary for coordination to be sustainable. First, the coordinating firms must be able to monitor to a sufficient degree whether the terms of coordination are being adhered to. Second, discipline requires that there is a credible deterrent mechanism that can be activated if deviation is detected. Third, the reactions of outsiders, such as current and future competitors not participating in the coordination, as well as customers, should not be able to jeopardise the results expected from the coordination²²⁵.
- (360) Moreover, in examining the possibility and sustainability of coordination, the Commission should specifically consider the changes that the Transaction brings about²²⁶. The reduction in the number of firms in a market may in itself be a factor that facilitates coordination.
- (361) To assess all the above elements and thus to ascertain the competitive effects of a merger, the Commission compares the competitive conditions that would result from the notified merger with the conditions that would have prevailed without the merger. In most cases the competitive conditions existing at the time of the merger constitute the relevant comparison for evaluating the effects of a merger. However, in some circumstances, the Commission may take into account future changes to the market that can reasonably be predicted. It may, in particular, take account of the likely entry or exit of firms if the merger did not take place when considering what constitutes the relevant comparison²²⁷.
- (362) In fact, the foreseeable development of competitive conditions could lead to the conclusion that the significant impediment of effective competition is not a consequence of the concentration, since the competitive structure of the market would in any event deteriorate to at least the same extent without the concentration. To examine this, the Commission will assess how the foreseeable deterioration of competition absent a merger compares to long-term structural effects of the merger on the relevant market.

8.2. Market shares and concentrations levels

8.2.1. Introduction

- (363) According to the Horizontal Merger Guidelines, market shares and concentration levels constitute useful first indications of the market structure

²²² Horizontal Merger Guidelines, paragraph 42.

²²³ Horizontal Merger Guidelines, paragraph 41

²²⁴ Horizontal Merger Guidelines, paragraph 40.

²²⁵ Horizontal Merger Guidelines, paragraph 42.

²²⁶ Horizontal Merger Guidelines, paragraph 42

²²⁷ Horizontal Merger Guidelines, paragraph 9.

and of the competitive importance of the market players²²⁸. The Horizontal Merger Guidelines explain that the larger the market share, the more likely a firm is to possess market power. Furthermore, the larger the addition of market share (or "increment") brought by the transaction, the more likely it is that a merger will lead to a significant increase in market power. Post-merger market shares are calculated on the assumption that the post-merger combined market share of the parties is the sum of their pre-merger market shares²²⁹.

- (364) In the mobile telecommunications sector, market shares based on existing subscribers only capture the competitive strength of market participants to a certain degree, in particular because recent trends may not be properly reflected. This is because customers may be bound to long-term contracts, which means that, at any given time, competition occurs only in respect of those contestable customers and entirely new customers (those who are not yet subscribers of mobile telecommunication services at all). Consequently it may take some time before trends in winning new business are reflected in the market shares. Accordingly, shares of contestable customers are an informative element in order to form a view on the likely dynamics in the market for the years following the Transaction.
- (365) In line with its precedents, the Commission considers that market shares based on gross additions ("gross adds") provide a reasonable measure that captures the current competitive strength of market participants²³⁰. Market shares based on gross adds are generally used in the telecommunications industry and are calculated on the basis of the respective number of new subscribers acquired in a year by each operator without deduction of the subscribers who leave.
- (366) Gross add shares are not necessarily identical to shares based on contestable customers as the set of contestable customers includes not only customers that decide to switch operator and which are usually reported as gross adds but also those customers that (actively) decide to either stay in their existing contract or who switch to another tariff but stay with the same operator. However, figures on the latter set of customers are difficult to obtain and shares based on gross-adds are likely to be reasonably close to shares based on contestable customers.
- (367) Thus in the following the Commission presents market share figures using three metrics: (i) the number of subscribers at a particular point in time; (ii) the value of revenues collected over the relevant period; and (iii) the number of gross adds over the relevant period²³¹.

²²⁸ Horizontal Merger Guidelines, paragraphs 14 and 16.

²²⁹ Horizontal Merger Guidelines, paragraph 27.

²³⁰ Commission decision of 2 July 2014 in case M.7018 – *Telefónica Deutschland/E-Plus*, recital 246; Commission decision of 12 December 2012 in case M.6497 – *Hutchison 3G Austria/Orange Austria*, recital 170; Commission decision of 1 September 2016 in case M.7758 – *Hutchison 3G Italy/WIND/JV*, recitals 366-386; and Commission decision of 11 May 2016 in case M.7612 - *Hutchison 3G UK/Telefonica UK*, recitals 379-382.

²³¹ Due to the recent changes in legislation related to the sale of mobile handsets (see recital 42), the Parties explained that the revenue market shares submitted in response to RFI 64 for the full year 2017 and Q1 2018 exclude recurring handset revenues and thus are not fully comparable to the revenue market shares for the period 2015-2016 as service revenues net of recurring handset revenues are not available in the third party data source (Telecompaper) used for the calculation of shares for the period before 2017.

- (368) The market shares and concentration levels presented in this decision are based on the submission of the Notifying Party in the notification and in the Notifying Party's response to RFI 64.
- (369) The Notifying Party has used the following methodology to calculate the below market shares. First, figures for TMNL are based on TMNL's actual sales. Second, figures for operators other than TMNL are based on third-party estimates and estimates provided by TMNL's experts. Third, figures for Tele2 NL in the resulting database have been replaced with Tele2 NL's actual sales. Fourth, the total market/segment sizes are recalculated by aggregating actual sales for the Parties and estimates for third-party competitors. Finally, market shares and concentration levels using the Herfindahl-Hirschman Index ("HHI") are calculated using these figures.
- (370) Market/segment shares were submitted on provider level basis only, while equally granular information on network level basis is not available. Data have been provided for the full years 2015, 2016 and 2017, as well as for the first quarter of 2018 (Q1).
- (371) Market shares are presented in the following based on the product and geographic market definitions discussed in Section 7.

8.2.2. *Market shares*

8.2.2.1. Market for retail mobile telecommunications services in the Netherlands

- (372) The market shares of the Parties and their largest competitors in the market for retail mobile telecommunications services in the year 2017 are provided in Table 3 in terms of revenues, subscribers, and gross adds.

Table 3 - Market shares for the retail mobile telecommunications market (FY 2017)

	Subscribers		Revenues		Gross adds	
	Thousands	Share (%)	Millions	Share (%)	Thousands	Share (%)
TMNL	[...]	[10-20]	[...]	[20-30]	[...]	[10-20]
Tele2 NL	[...]	[5-10]	[...]	[5-10]	[...]	[5-10]
Combined	[...]	[20-30]	[...]	[20-30]	[...]	[20-30]
KPN	[...]	[30-40]	[...]	[30-40]	[...]	[10-20]
VodafoneZiggo	[...]	[20-30]	[...]	[20-30]	[...]	[10-20]
All MVNOs	[...]	[10-20]	[...]	[5-10]	[...]	[30-40]
Lebara	[...]	[0-5]	[...]	[0-5]	[...]	NA*
Lycamobile	[...]	[0-5]	[...]	[0-5]	[...]	NA*
Simpel	[...]	[0-5]	[...]	[0-5]	[...]	NA*
AH Mobiel	[...]	[0-5]	[...]	[0-5]	[...]	NA*
Youfone	[...]	[0-5]	[...]	[0-5]	[...]	NA*
Other MVNOs	[...]	[0-5]	[...]	[0-5]	[...]	NA*
Total	[...]	100	[...]	100	[...]	100

Source: Annex to Notifying Party’s Response to RFI 64.

* The Parties have not been able to provide individual gross add shares for MVNOs.

(373) Table 3 shows that post-Transaction the merged entity would have a [20-30]% and [20-30]% market share by subscribers and by revenues respectively, remaining the third largest player in the Dutch retail mobile market after KPN and VodafoneZiggo in terms of revenues, and the second largest player by a narrow margin before VodafoneZiggo in terms of subscribers. MVNOs, taken together, represent [10-20]% of subscribers and [5-10]% of revenues. Although there are a large number of MVNOs, most of them have a very small market presence. The largest MVNOs are Lebara, Lycamobile and Simpel.

(374) Based on gross adds, the merged entity would become the market leader ahead of both KPN and VodafoneZiggo with a [20-30]% market share. The gross add shares of the merged entity, KPN and VodafoneZiggo are all in the same ballpark. Together, MVNOs would have a gross add share almost double the one of the Parties, but it is not meaningful to compare the market share (or gross add share) of an MNO with a heterogeneous collection of MVNOs with different business strategies and customer focuses.

8.2.2.2. Segment shares for retail mobile telecommunication services to private customers and sub-segments

(375) As explained in Section 7.1, for the purposes of the assessment of this case, the Commission does not consider it appropriate to further segment the retail mobile telecommunications market. However, for completeness and for information, in this section, the Commission has included the market shares for: (i) private customers; and (ii) private customers split by postpaid and prepaid customers.

(376) Private customers constitute the largest part of the overall retail market. In 2017, this segment amounted to EUR 2 728.3 by revenues and over 16 million subscribers. The shares of the Parties and their largest competitors in the segment for retail mobile telecommunications services to private customers in the year 2017 are provided in Table 4 in terms of revenues, subscribers, and gross adds.

Table 4 - Market shares private customers in the mobile telecommunications market (FY 2017)

	Subscribers		Revenues		Gross adds	
	Thousands	Share (%)	Millions	Share (%)	Thousands	Share (%)
TMNL	[...]	[10-20]	[...]	[20-30]	[...]	[10-20]
Tele2 NL	[...]	[5-10]	[...]	[5-10]	[...]	[5-10]
Combined	[...]	[20-30]	[...]	[30-40]	[...]	[20-30]
KPN	[...]	[30-40]	[...]	[30-40]	[...]	[10-20]
VodafoneZiggo	[...]	[20-30]	[...]	[20-30]	[...]	[10-20]
All MVNOs	[...]	[20-30]	[...]	[10-20]	[...]	[40-50]
Lebara	[...]	[5-10]	[...]	[5-10]	[...]	NA*
Lycamobile	[...]	[5-10]	[...]	[5-10]	[...]	NA*
Simpel	[...]	[5-10]	[...]	[5-10]	[...]	NA*
AH Mobiel	[...]	[5-10]	[...]	[5-10]	[...]	NA*
Youfone	[...]	[5-10]	[...]	[5-10]	[...]	NA*
Other MVNOs	[...]	[5-10]	[...]	[5-10]	[...]	NA*
Total	[...]	100.0	[...]	100.0	[...]	100.0

Source: Annex to Notifying Party's Response to RFI 64.

* The Parties have not been able to provide individual gross add shares for MVNOs.

(377) Table 4 shows that post-Transaction, based on subscriber numbers and revenues, the merged entity would have a share of [20-30]% by subscribers and [30-40]% by revenues, making it the second largest player by a small margin after KPN but materially larger than VodafoneZiggo, on both metrics.

(378) In the overall private segment, only three MVNOs had a sizable subscriber market share in 2017: Lebara ([5-10]%), Lycamobile ([0-5]%) and Simpel ([0-5]%). The next largest MVNOs, AH Mobiel and Youfone, had a share of about 1% only.

(379) Based on gross adds, the merged entity would become the market leader ahead of both KPN and VodafoneZiggo with a [20-30]% market share although its gross add market share remains lower than its market share either by subscribers or revenues. Together, MVNOs would have a gross add share almost double the one of the Parties, however it is not meaningful to compare the market share (or gross add share) of an MNO with a heterogeneous collection of MVNOs with different business strategies and customer focuses.

- (380) The private post-paid sub-segment accounts for the largest part of the overall retail market. In 2017, it amounted to EUR 2 447 by revenues and 11 million subscribers, against a prepaid sub-segment estimated at EUR 283 million by revenues and 5 million by subscribers. Thus, the sub-segment of postpaid private customers accounts for close to 90% by revenues and more than 65% by subscribers of the overall private market/segment. The private postpaid sub-segment is growing while the prepaid segment is in decline. From 2016 to 2017, the postpaid segment subscriber base has grown by 5% while the number of subscribers in the prepaid segment decreased by 8%.
- (381) The shares of the Parties and their largest competitors in private postpaid sub-segment in the year 2017 are provided in Table 5 in terms of revenues, subscribers, and gross adds.

Table 5 - Market shares for the private postpaid segment of the mobile telecommunications market (FY 2017)

	Subscribers		Revenues		Gross adds	
	Thousands	Share (%)	Millions	Share (%)	Thousands	Share (%)
TMNL	[...]	[20-30]	[...]	[20-30]	[...]	[20-30]
Tele2 NL	[...]	[10-20]	[...]	[5-10]	[...]	[10-20]
Combined	[...]	[30-40]	[...]	[30-40]	[...]	[40-50]
KPN	[...]	[30-40]	[...]	[30-40]	[...]	[20-30]
VodafoneZiggo	[...]	[20-30]	[...]	[20-30]	[...]	[20-30]
All MVNOs	[...]	[10-20]	[...]	[0-5]	[...]	[5-10]
Lebara	[...]	[0-5]	[...]	[0-5]	[...]	NA*
Lycamobile	[...]	-	[...]	-	[...]	NA*
Simpel	[...]	[0-5]	[...]	[0-5]	[...]	NA*
AH Mobiel	[...]	-	[...]	-	[...]	NA*
Youfone	[...]	[0-5]	[...]	[0-5]	[...]	NA*
Other MVNOs	[...]	[0-5]	[...]	[0-5]	[...]	NA*
Total	[...]	100.0	[...]	100.0	[...]	100.0

Source: Annex to Notifying Party's Response to RFI 64.

- * The Parties have not been able to provide individual gross add shares for MVNOs.

- (382) Table 5 shows that post-Transaction, based on subscriber numbers and revenues, the merged entity would have a share of [30-40]% by subscribers and [30-40]% by revenues. Based on revenues, the share of the merged entity would be larger than both KPN and VodafoneZiggo. Based on subscribers, the share of the merged entity would be only marginally smaller than KPN by subscribers.

- (383) Simpel is the only significant postpaid MVNO with a subscriber share of [5-10]% in 2017. Youfone, also active in the postpaid segment, had a subscriber share of [0-5]%.
- (384) Based on gross adds, the merged entity would become the leader ahead of both KPN and VodafoneZiggo with a share of over [40-50]%. The MVNOs have a far smaller joint share below [10-20]%.
- (385) The shares of the Parties and their largest competitors in the private prepaid sub-segment in the year 2017 are provided in Table 6 in terms of subscribers, revenues, and gross adds.

Table 6 - Market shares for the private prepaid segment of the mobile telecommunications market (FY 2017)

	Subscribers		Revenues		Gross adds	
	Thousands	Share (%)	Millions	Share (%)	Thousands	Share (%)
TMNL	[...]	[5-10]	[...]	[5-10]	[...]	[0-5]
Tele2 NL	[...]	[0-5]	[...]	[0-5]	[...]	[0-5]
Combined	[...]	[10-20]	[...]	[5-10]	[...]	[0-5]
KPN	[...]	[20-30]	[...]	[10-20]	[...]	[10-20]
VodafoneZiggo	[...]	[10-20]	[...]	[10-20]	[...]	[5-10]
All MVNOs	[...]	[40-50]	[...]	[60-70]	[...]	[70-80]
Lebara	[...]	[10-20]	[...]	[30-40]	[...]	NA
Lycamobile	[...]	[10-20]	[...]	[20-30]	[...]	NA
Simpel	[...]	-	[...]	-	[...]	NA
AH Mobiel	[...]	[0-5]	[...]	[0-5]	[...]	NA
Youfone	[...]	-	[...]	-	[...]	NA
Other MVNOs	[...]	[5-10]	[...]	[5-10]	[...]	NA
Total	[...]	100.0	[...]	100.0	[...]	100.0

Source: Annex to Notifying Party's Response to RFI 64.

- (386) Tele2 NL is only marginally present in the private prepaid sub-segment and also TMNL's activities are more limited compared to the private postpaid segment. Table 6 shows that post-Transaction, based on subscriber numbers and revenues, the merged entity would have a share of, respectively, [10-20]% and [5-10]%. Based on gross adds, the combined shares would be more moderate at [0-5] %.
- (387) Lebara and Lycamobile are by large and far the most significant prepaid MVNOs (with prepaid segment shares of [10-20]% and [10-20]% respectively).

8.2.2.3. Segment for retail mobile telecommunication services to business customers

- (388) As explained in Section 7.1, the Commission does not consider it appropriate to further segment the retail mobile telecommunications market. However, for

completeness and for information, the Commission has included the market shares for business customers.

- (389) The business market segment accounts for the smallest part of the overall retail market. In 2017, it amounted to EUR 1 055.5 million by revenues and less than 4.5 million by subscribers. Thus the business market segment accounts for 30% by revenues and 20% by subscribers of the overall retail market. Further, the business market segment accounts for the smallest part of the overall retail market also by gross adds²³².
- (390) The shares of the Parties and their largest competitors in the market/segment for retail mobile telecommunications services to business customers in the year 2017 are provided in Table 7 in terms of revenues, subscribers, and gross adds.

Table 7 - Market shares for the business segment of the mobile telecommunications market (FY 2017)

	Subscribers		Revenues		Gross adds	
	'000	Share (%)	Millions	Share (%)	'000	Share (%)
TMNL	[...]	[10-20]	[...]	[10-20]	[...]	[20-30]
Tele2 NL	[...]	[0-5]	[...]	[0-5]	[...]	[5-10]
Combined	[...]	[10-20]	[...]	[10-20]	[...]	[30-40]
KPN	[...]	[40-50]	[...]	[40-50]	[...]	[30-40]
VodafoneZiggo	[...]	[30-40]	[...]	[30-40]	[...]	[20-30]
MVNOs*	[...]	[0-5]	[...]	[0-5]	[...]	[0-5]
Total	[...]	100.0	[...]	100.0	[...]	100.0

Source: Annex to Notifying Party's Response to RFI 64 of 21 July 2018.

- (391) Table 7 shows that post-Transaction, based on subscriber numbers and revenues, the merged entity would have a market share below 20% in the business market/segment. In particular, the increment is very low with Tele2 NL having a subscriber share of [0-5]% and a revenue share of [5-10]%. However, when looking at gross add shares in this segment, the merged entity would have a share that is slightly above 30%, with an increment of [5-10]%.

8.2.3. Concentration levels

- (392) Table 8 shows concentration levels in the market/segments for which market shares are provided in Section 8.2.2. Concentration levels are measured using the HHI based on subscribers and revenues market shares.

²³² Based on Parties' data submitted in the Annex to the response to RFI 64 of 21 July 2018.

Table 8 - HHI on retail mobile market and its segments (FY 2017)

		Pre-Transaction	Post-Transaction	Delta
Overall retail				
Subscribers		[2000-3000]	[2000-3000]	[0-500]
Revenue		[2000-3000]	[2000-3000]	[0-500]
Private customers				
Overall	Subscribers	[2000-3000]	[2000-3000]	[0-500]
	Revenue	[2000-3000]	[2000-3000]	[0-500]
Postpaid	Subscribers	[2000-3000]	[2000-3000]	[0-500]
	Revenue	[2000-3000]	[3000-4000]	[0-500]
Prepaid	Subscribers	[3000-4000]	[3000-4000]	[0-500]
	Revenue	[4000-5000]	[4000-5000]	[0-500]
Business customers				
Subscribers		[3000-4000]	[3000-4000]	[0-500]
Revenue		[3000-4000]	[3000-4000]	[0-500]

Source: Annex to Notifying Party’s Response to RFI 64.

- (393) Table 8 shows that the post-Transaction HHI on the overall market for retail mobile telecommunication services would be considerable, namely [2000-3000] based on subscriptions and [2000-3000] based on revenues. Likewise, in the overall private segment, the HHI would amount to [2000-3000] based on subscribers and [2000-3000] based on revenues after the Transaction and for postpaid private customers, [2000-3000] based on subscribers and [3000-4000] based revenues.
- (394) However, the change in HHI pre- and post-Transaction on the overall retail market, which is a useful proxy for the change in concentration directly brought about by the merger²³³, is moderate, namely [0-500] based on subscriptions and [0-500] based on revenues.

8.3. Non-coordinated horizontal effects on the market for retail mobile telecommunication services in the Netherlands

- (395) The Transaction combines the operations of TMNL and Tele2 NL, respectively the third and the fourth operator in the market. As set out in Section 8.2.2, post-Transaction, based on subscriber numbers and revenues, the merged entity would have a share of [20-30]% by subscribers and [20-30]% by revenues. The merged entity's market share by gross adds would remain lower than its market share by subscribers or by revenues, at [20-30]%. Following the Transaction it will remain as the third largest player in the Dutch retail mobile market after KPN and VodafoneZiggo in terms of revenues, and the second largest player by a narrow margin ahead of VodafoneZiggo in terms of subscribers. The

²³³ Horizontal Merger Guidelines, paragraph 16.

combined market shares post-Transaction are either below, or just above, the level at which the market is considered to be affected.

- (396) Tele2 NL has a reasonably limited position in the market with a share of [5-10]% by subscribers and [5-10]% by revenues. Tele2 NL's market share by gross adds is also relatively limited at [5-10]%. While the HHI level of the market is high, well above 2 000 on all metrics, the limited market share of Tele2 NL results in a HHI delta of below 250.
- (397) Market shares figures and HHI figures alone do not give a presumption as to the absence of competition concerns however, as envisaged by the Horizontal Merger Guidelines, they give an indication that the Transaction may not be liable to impede effective competition.
- (398) For the reasons set out in Section 8.3.1, the Commission considers that TMNL is an important competitor on the retail mobile telecommunications market in the Netherlands. Its aggressive strategy has allowed it to overturn a previously negative trend and to return to customer growth. Part of this strategy was the roll out of the best mobile network in the Netherlands and the introduction of innovative mobile tariffs. The Commission has no reason to believe that TMNL's current competitive constraint is likely to deteriorate going forwards.
- (399) In Section 8.3.2, the Commission concludes that, in the framework of the forward looking analysis which has to be carried out under the Merger Regulation, Tele2 NL cannot be considered an important competitive force within the meaning of paragraphs 37 – 38 of the Horizontal Merger Guidelines on the retail mobile telecommunications market in the Netherlands in light of: (i) its limited market share; (ii) its competitive behaviour and performance; (iii) its network limitations; and (iv) the fact that even though it is likely that Tele2 NL [...], its competitive strength will likely deteriorate.
- (400) Sections 8.3.3 and 8.3.4 summarize the competition TMNL and Tele2 NL face from KPN and VodafoneZiggo. The Commission considers that both KPN and VodafoneZiggo are important competitors on the Dutch retail telecommunications market.
- (401) Section 8.3.5 explains why MVNOs currently do not exercise much competitive pressure on MNOs in the Dutch market.
- (402) In Section 8.3.6 the Commission considers the extent to which the Parties are close competitors. The evidence in the Commission's file indicates that pre-Transaction TMNL and Tele2 NL are close competitors. However, the increasing gap in network performances (capacity and quality) between TMNL and Tele2 NL casts doubts on Tele2 NL's ability to maintain the close competition that it has exerted in the past.
- (403) Taking into account all these relevant factors which influence whether or not the Transaction is likely to result in a significant impediment to effective competition, the Commission considers that the elimination of the competitive constraints exerted by the Parties pre-Transaction on each other within the meaning of paragraph 25 of the Horizontal Merger Guidelines, is not likely to significantly weaken competition and hence is not likely to induce significant price increases, reduce incentives to innovate and invest in network quality or to reduce innovative pricing strategies. In addition, the Commission concludes that the Transaction will lead to efficiencies linked to the NRA accepted in Section 8.5.2. These overall findings are complemented by the Commission's

quantitative assessment set out in Section 8.3.10 which also takes into account the efficiencies linked to the NRA accepted in Section 8.5.2.

8.3.1. *Competitive strength of TMNL*

8.3.1.1. Notifying Party's views

- (404) The Notifying Party submits that TMNL is engaging in a dual brand strategy in which its main brand ("T-Mobile") is positioned at the premium segment of the market and its second brand "Ben" competes in the basic segment.
- (405) It submits that TMNL has a focus [...] and is competing [...] against the FMC propositions of KPN and Vodafone²³⁴.
- (406) The Notifying Party further submits that while TMNL has been innovative and was the first MNO to introduce an unlimited data proposition in the market, it is not able to compete as a viable player in the FMC due to its current assets and capabilities which is critical given the ever increasing importance of FMC offers in the Netherlands. In particular, TMNL has not had fixed assets until recently and has for some time operated as a mobile-only player. Only since the acquisition of Vodafone's Dutch fixed assets at the end of 2016 has TMNL also been active on the fixed market based on access granted by KPN²³⁵. [Description of other obstacles faced by TMNL in developing competitive FMC offers]^{236 237}.
- (407) Moreover, the Notifying Party is of the view that TMNL [...] player in the business segment. It currently offers mainly mobile telecommunication services to business customers but it is unable to offer competitive FMC products to the business segment of the market.
- (408) In the Response to the Statement of Objections, the Notifying Party submits that the Commission failed to articulate and meet the legal standard for considering that TMNL has acted as an important competitive force. The Notifying Party further argues that, under the appropriate legal standard, the Commission should have demonstrated in the Statement of Objections that TMNL has had more of an influence on the competitive process than its market shares would suggest and that the Commission has failed to do so.

8.3.1.2. Commission's assessment

- (409) The Commission considers that TMNL is an important competitor on the retail mobile telecommunications market in the Netherlands in light of: (i) its market share; (ii) its aggressive competitive behaviour; and (iii) its strength with respect to the main competitive parameters on the Dutch market.

A. *Assessment of market shares*

- (410) TMNL's subscriber and revenue shares in the retail mobile market have been consistent with an upward trend; from 2015 to 2017, TMNL's market share has grown by [0-5]% in subscribers and [0-5]% in revenues.

²³⁴ See Form CO, paragraph 888.

²³⁵ See Form CO, paragraph 95. Previously TMNL offered fixed internet through its Euronet business division, which partly had its own fixed infrastructure. In 2014, TMNL sold this division in order to focus on its mobile offering.

²³⁶ See Form CO, paragraphs 694-702.

²³⁷ See Form CO, paragraphs 703-718.

- (411) TMNL's gross add share has been lower than its market share by subscribers in all years (2015 – 2017) but it has slightly increased during the same period. Overall, TMNL's subscriber and revenue shares have remained in the range of [10-20]% to [20-30]%. Non-MNOs that replied to the Market Investigation consider that TMNL would be able to further increase its market share going forward²³⁸.

B. TMNL's aggressive competitive behaviour

- (412) Prior to 2016, TMNL followed DTAG's group wide commercial policy and was therefore unable to adopt strategy specifically adapted to allow [...] Since 2016, TMNL has adopted a more aggressive strategy [...].
- (413) This shift to becoming a more aggressive and disruptive player can be seen from the extracts of the internal documents from an internal meeting which took place on 9 March 2016²³⁹ for example:
- "[...]";
 - "[...]",
 - "[...]"
 - "[...]".
- (414) TMNL's launch of new unlimited tariffs is emblematic of this shift to being a more disruptive player in the market. TMNL has been the first player to launch such tariffs in the Dutch market in January 2017; internal documents indicate that TMNL considered that, through its unlimited mobile tariffs, it had achieved its objective to: "[...]" and "[...]"²⁴⁰. Equally, internal documents indicate that part of the rationale was to take advantage of its network capacity and "[...]"²⁴¹.
- (415) Another example of TMNL's revised strategy is the TMNL's "group play" product launched in Q1 2017. This initiative involves granting an additional discount to customers which had multiple TMNL lines/subscriptions either individually or within a group (e.g. within the same family).
- (416) TMNL's new unlimited tariffs have been very successful as can be seen from its share of postpaid net-adds for the quarter directly following the launch of its new tariffs (Q1 2017). Indeed, TMNL has captured [70-80]% of the total postpaid, way ahead of the other MNOs²⁴².
- (417) TMNL's change of strategy and these new offers very quickly resulted in strong market performances. For example, TMNL was the "[...]"²⁴³ (+71K) in Q4 2016 whereas Tele2 NL [...] (+58K) in terms of net adds, significantly ahead of KPN (+5K) and VodafoneZiggo (-25K)²⁴⁴. Taking into account all of 2016 (full year), TMNL also reported strong performances in terms of postpaid net adds which went from "[...]"²⁴⁵.

²³⁸ See replies to RFI 23 to non-MNOs of 2 May 2018, questions C.B.3.

²³⁹ TMNL's internal documents, [...].

²⁴⁰ TMNL internal documents, [...].

²⁴¹ TMNL internal documents, [...].

²⁴² TMNL internal documents, [...].

²⁴³ TMNL internal documents, [...].

²⁴⁴ TMNL internal documents, [...].

²⁴⁵ TMNL internal documents, [...].

- (418) TMNL's strong performance in terms of customer acquisition can also be seen from its competitive benchmark for Q2 2017. Indeed TMNL has recorded [...] on the postpaid mobile market segment in Q4 2016, Q1 2017 and Q2 2017 while Tele2 NL comes second, ahead of KPN and VodafoneZiggo²⁴⁶.
- (419) Respondents to the Market Investigation emphasise the challenger position TMNL has on the market. In particular, TMNL has recently been seen as an aggressive player by many respondents for all private customer groups²⁴⁷. Many highlight that it was also the first MNO to offer an unlimited data tariff in the Dutch market; one respondent, for instance observes that: "*T-Mobile has become very aggressive on Unlimited packages and is now moving also into the lower end of the market with aggressive pricing (countering the Tele2 and Simpel offerings).*"²⁴⁸.

C. *Performance with respect to the main competitive parameters*

- (420) The Commission considers that pre-Transaction TMNL is an important competitor with respect to price, which is the most important parameter of competition. TMNL is also an important competitor with respect to other secondary parameters such as network quality (reliability, coverage and speed) as well as other parameters of competition, such as product innovation and ability to provide fixed services, whose relevance is currently limited but it is expected that it will grow in the next two years²⁴⁹.
- (i) Price related competition
- (421) The Commission considers that TMNL is an important competitor with regard to price in the Netherlands. As shown by Figure 17, TMNL offers comparable pricing to the other MNOs active in the Dutch market and, in a number of instances for specific data allowances, it is cheaper than other MNOs offering the same size package. Equally, as the ACM notes, for the higher data bundles, TMNL appears to offer particularly competitive prices. Together with Tele2 NL, they are the only MNOs offering an unlimited data package.
- (ii) Network based competition
- (422) The Commission notes that TMNL has offered the best quality network in the Netherlands for several years.
- (423) TMNL's roll-out of its 4G network was initially delayed by its failure to win 800MHz spectrum in the 2012 auction. Unlike its competitors who were able to use the 800MHz spectrum they had secured at the 2012 auction, TMNL had to build a 4G network using mid-band spectrum which required the roll-out of a much denser network of antennae and therefore took more time.
- (424) At the end of 2015, however, TMNL managed to overtake its competitors in terms of network quality thanks to a denser and more modern network. For example, TMNL reported in a February 2017 document that it owned the "[...]"²⁵⁰. This is consistent with the results of the P3's network benchmarks in the Netherlands according to which "*as in previous years, the overall winner is*

²⁴⁶ TMNL internal documents, [...]

²⁴⁷ See responses to RFI 23 to non-MNOs of 2 May 2018, question C.B.2.

²⁴⁸ See Artium's response to RFI 23 to non-MNOs of 2 May 2018, question C.B.2 [ID 904].

²⁴⁹ See recital 145.

²⁵⁰ TMNL internal documents, [...].

T-Mobile. This time, the winner even achieves an impressive 977 points – the highest score which has ever been achieved in a P3 connect Mobile Benchmark – and the grade „outstanding“²⁵¹.

- (425) The improved network of TMNL is also reflected in TMNL having won the award for best mobile network in the Netherlands in the last three years (2016-2018) and TMNL being labelled as the fastest mobile carrier in the world²⁵².
- (426) Analysts also confirm that TMNL owns the leading network in the Netherlands; in particular TMNL delivers the fastest speeds and has nationwide 4G coverage (approx. [80-90]% coverage) on par with KPN and VodafoneZiggo and ahead of Tele2 NL²⁵³. TMNL also has [20-30]% more towers than KPN and VodafoneZiggo and [50-60]% more 4G antennae than KPN, and [80-90]% more than VodafoneZiggo and Tele2 NL²⁵⁴. In addition, TMNL has more network capacity per subscriber than KPN and VodafoneZiggo (but less than Tele2 NL)²⁵⁵. As apparent from minutes of a TMNL March 2016 meeting, one of the key drivers for launching the first unlimited data tariffs in the Netherlands was TMNL's willingness to [...]. TMNL also actively advertises its network advantage as can be seen from the following extract of meeting minutes: "[...]"²⁵⁶.
- (427) Consistent with recitals 424 – 426, respondents to the Market Investigation observe that TMNL considerably improved its network. The improved network quality, the introduction of the unlimited data tariff, and the improved brand awareness are seen as developments within TMNL that have made it quite successful on the Dutch market in the last two years²⁵⁷.
- (iii) Other relevant parameters
- (428) With respect to the supply of innovative products (the third most important parameter of competition)²⁵⁸, besides its unlimited EU tariffs, TMNL has also launched a number of other innovative services such as its "Music Freedom" service which allows customers to stream music even after they have run out of data credit²⁵⁹. In addition TMNL mentioned in a February 2017 presentation "[...]"²⁶⁰.
- (429) With respect to the ability to provide fixed services, while until recently TMNL did not offer any mobile/fixed bundles due to its lack of fixed network, TMNL acquired VodafoneZiggo's fixed business in 2016 therefore enabling it to offer

²⁵¹ <https://www.t-mobile.nl/business/media/pdf/network/netwerk/p3-benchmark-2018-eng.pdf> [ID 2513-11]

²⁵² See Form CO, paragraph 828.

²⁵³ Exane BNP Paribas, Unlimited Data – Why? How? So What? What Next?, 16 January 2017, page 19, Form CO Annex 5(14)(2)(1) [ID: 381-288].

²⁵⁴ Exane BNP Paribas, Unlimited Data – Why? How? So What? What Next?, 16 January 2017, page 21, Form CO Annex 5(14)(2)(1) [ID: 381-288].

²⁵⁵ Exane BNP Paribas, Unlimited Data – Why? How? So What? What Next?, 16 January 2017, page 22, Form CO Annex 5(14)(2)(1) [ID: 381-288].

²⁵⁶ TMNL's internal documents, [...].

²⁵⁷ See Galaxy's, Voiceworks' and M7 Group SA' responses to RFI23 to non-MNOs of 2 May 2018, question C.B.2 [ID 517, 907, 906].

²⁵⁸ See recital 145.

²⁵⁹ It should however be noted that this type of "zero rated service" had been offered by Vodafone already in 2013. Vodafone later discontinued this service as it was deemed to contravene net neutrality provisions which were in force at the time.

²⁶⁰ TMNL internal documents, [...]

fixed services to existing and new mobile consumers. In 2017, TMNL launched an FMC offer. As explained in the ACM Position Paper, the ACM considers that TMNL can offer competitive FMC-bundles on a standalone basis²⁶¹.

D. Conclusion on TMNL's competitive strength

- (430) Based on the above elements, the Commission considers that TMNL is an important competitor in the Dutch retail mobile market. The Commission has no reason to believe that TMNL's current competitive strength is likely to deteriorate absent the Transaction.

8.3.2. Competitive strength of Tele2 NL

8.3.2.1. Notifying Party's views

- (431) With respect to the competitive constraints exercised by Tele2 NL pre-Transaction, the Notifying Party is of the view that Tele2 NL cannot be regarded as a maverick in the Dutch mobile telecommunications market²⁶². In particular, the Notifying Party submits that Tele2 NL is a weak competitor in the Dutch mobile market due to its hybrid status between an MNO and MVNO and the adverse economics attached thereto²⁶³.
- (432) First, the Notifying Party argues that the Commission has failed to provide sufficient clarity as to the legal standard it has applied in assessing whether Tele2 NL is an important competitive force. According to the Notifying Party, in an oligopolistic market such as the market for retail mobile telecommunication, a player can only be found to be an important competitive force if it stands out from the other market participants, i.e., if it is particularly important or aggressive in the market.
- (433) Second, the Notifying Party argues that the evolution of Tele2 NL's market shares do not support a finding that Tele2 NL exerts an important competitive constraint on the market. In particular, it argues that the increase of Tele2 NL's market shares since its entry as an MNO has been negligible and that Tele2 NL has [...]. It also argues that Tele2 NL's gross adds in the overall retail private mobile market are in line or below Tele2 NL's current market shares.
- (434) Third, the Notifying Party submits that the evidence put forward by the Commission in its Statement of Objections do not demonstrate that Tele2 NL's entry is responsible for a decline in mobile retail pricing in the Netherlands. The Notifying Party further submits that the Commission failed to acknowledge that multiple other factors contributed to this price decrease, such as the additional available spectrum, FMC cross-subsidy and role of OTT players.
- (435) Fourth, the Notifying Party submits that Tele2 NL's performances have deteriorated since the launch of its unlimited tariffs in May 2017 and that Tele2 NL's recent performances are not indicative of a strong competitor. The Notifying Party also contests the Commission's analysis of Tele2 NL's internal documents on the basis of which it considers that the Commission has

²⁶¹ ACM Position Paper, page 8 [ID 2427].

²⁶² See Form CO, paragraph 534.

²⁶³ See Form CO, paragraph 414-415. Annex 8A(1) to the Form CO, "[...].

incorrectly concluded that the Transaction has had a negative impact on Tele2 NL's recent performances.

- (436) Fifth, the Notifying Party submits that the Statement of Objections' conclusion that Tele2 NL always offers the lowest or second lowest prices in the market is not supported by the available evidence. According to the Notifying Party, Tele2 NL is not a price leader but a price follower. The Notifying Party also submits that Tele2 NL is not able to compete on network-related parameters which affects its position now and in the future.
- (437) Sixth, the Notifying Party submits that Tele2 NL is not an important competitive force in relation to network quality and can also not be characterised as an innovative player. With respect to innovation, Tele2 NL is a follower as it was for example the case for the introduction of unlimited tariffs.
- (438) With respect to the competitive constraints exercised by Tele2 NL post-Transaction, the Parties submit that it is highly unlikely that Tele2 NL will, absent the Transaction, remain a significant competitive force in the market²⁶⁴.
- (439) The Notifying Party argues that Tele2 NL's current ability to compete is already limited [...] as it faces many challenges. First, Tele2 NL [...].
- (440) With respect to the NSA in place between the Parties, the Notifying Party claims that [Description of Tele2 NL's anticipated network challenges in relation to the NSA between the Parties]²⁶⁵.
- (441) The Notifying Party claims that Tele2 NL's prospects have materially worsened [Description of Tele2 NL's plan should the merger not materialize]²⁶⁶.
- (442) [...]. Therefore, the Parties conclude that the appropriate alternative scenario against which the Commission should assess the likely impact of the Transaction, is one in which Tele2 NL's competition position deteriorates and [...]. Nonetheless, the Notifying Party has not submitted a failing firm defence argument.

8.3.2.2. Commission's assessment

- (443) The Commission concludes that, in the framework of the forward looking analysis which has to be carried out under the Merger Regulation, Tele2 NL cannot be considered an important competitive force within the meaning of paragraphs 37 and 38 of the Horizontal Merger Guidelines on the retail mobile telecommunications market in the Netherlands in light of: (i) its limited market share; (ii) its competitive behaviour and performance; (iii) its network limitations; and (iv) the fact that even though it is likely that Tele2 NL would continue [on the same basis] in the Dutch market in the absence of the Transaction, its competitive strength will likely deteriorate. As the Transaction does not result in an impediment of effective competition even if Tele2 NL continues [on the same basis], the Commission does not need to conclude on whether Tele2 NL will actually continue operating [on the same basis].”

²⁶⁴ See Annex 8A(1) to Form CO, "[...]".

²⁶⁵ See e.g. Annex 8A(1) to the Form CO, [...], [...].

²⁶⁶ See Article 6(1)(c) Response, paragraphs 167, 189; [...].

- A. *Competitive strength of Tele2 NL pre-Transaction*
- (i) Assessment of market shares
- (444) The Commission observes that Tele2 NL's market share on the relevant market remains limited around [5-10]% both in terms of subscribers and revenues while the gross add shares are only slightly higher, (around [5-10]%).
- (445) Despite the several commercial offers described in Section 8.3.2.2.A(ii), as apparent from the market shares, Tele2 NL has only been able to grow its retail mobile market share to a limited extent, achieving in 2017 a market share of [5-10]% in terms of subscriber and [5-10]% in terms of value (respectively [0-5]% and [0-5]% growth compared to its 2015 market share). In particular, Tele2 NL's market share is far from the [...]. The comparison between Tele2 NL's actual performance in terms of subscribers and revenues and the forecasts at the time of the announcement of Tele2 NL's shift to an MNO also shows that Tele2 NL's performances since [its entry as an MNO have been significantly below expectations].
- (ii) Tele2 NL's competitive behaviour and performance
- (446) The Commission assessed the development of Tele2 NL's behaviour and performance since the announcement of its entry as the fourth MNO on the Dutch retail mobile market. Whereas Tele2 NL's entry as an MNO was accompanied by aggressive commercial offers, [...].
- (a) *Tele2 NL's entry as a fourth MNO in the Netherlands*
- (447) Based on the evidence in its case file including the additional evidence provided by the Notifying Party in the Response to the Statement of Objections, the Commission considers that Tele2 NL's entry as an MNO was initially accompanied by aggressive commercial offers and constituted an important reason for the decline in price which has been observed in the Netherlands in the years just before and after Tele2 NL's launch.
- (448) As can be seen from a Tele2 NL presentation given to Dutch analysts and journalists ahead of Tele2 NL's launch of its MNO services, in the first half of 2015, the Dutch mobile market was characterised by relatively low data usage (the amount of Mbytes per SIM and month was for example significantly lower than in Finland, Austria or Ireland) and high data price (mobile service revenue per Mbyte was for example significantly higher than in the United Kingdom, France or Portugal). On this basis, Tele2 NL identified an opportunity to enter the Dutch market with aggressive tariffs offering more data for a cheaper price²⁶⁷.
- (449) When, in November 2015, Tele2 NL proceeded to the launch of its 4G network, it started offering new tariffs aimed at attracting new customers on its network. Tele2 NL's willingness to compete aggressively on the Dutch market is apparent from a number of Tele2 NL's statements, for example: "[...]"; "[...]"; "[...]"²⁶⁸.

²⁶⁷ Tele2 NL internal documents, "[...]."

²⁶⁸ Tele2 AB internal documents, "[...]."

- (450) At the time of its MNO launch, Tele2 NL was most aggressive on handset subscriptions for which it offered "[...]"²⁶⁹. [Reasons why Tele2 NL was most aggressive on handset subscriptions].
- (451) As apparent from its internal documents, Tele2 NL heavily communicated on the fact that it would offer quality services at a cheaper price²⁷⁰. In its promotional messages, Tele2 NL also highlighted that, while including more data, its new mobile tariffs were cheaper *versus* its competitors and in particular *versus* TMNL²⁷¹.
- (452) TMNL's internal documents also confirm that the switch of Tele2 NL from an MVNO to an MNO and the new aggressive tariffs that Tele2 NL launched at this occasion constituted a major event on the Dutch market which played an important role in the significant decrease of market prices. Indeed, TMNL described Tele2 NL's launch of its 4G network as the entry of a fourth MNO and anticipated that this entry would increase competition on the Dutch market. For example, in internal documents dating from a few months before Tele2 NL's launch of its 4G network (April 2015), TMNL mentioned [...]"²⁷².
- (453) The Commission, however, notes that other factors than Tele2 NL's launch of its MNO services have also played a role in the trend for larger data bundles/lower prices in the Netherlands. This is in particular the case for the increase in the amount of available spectrum following the 2012 spectrum auction. Indeed, the additional capacity resulting from this spectrum increased the ability and incentive of market players to compete more aggressively for new subscribers by offering larger data bundles coupled with lower prices²⁷³. The release of additional spectrum is also identified by KPN as having played a key role in the decrease of mobile prices²⁷⁴.
- (454) Additionally, Tele2 NL's launch of its 4G network and aggressive tariffs were also heavily relayed by the Dutch press. As can be seen from a press review put together by Tele2 NL, headlines included for example: "*Tele2 starts price war in speedy mobile internet market*", "*Tele2 stuns mobile industry with cheap 4G deals on phone purchase*" and "*rebel Tele2 aims to conquer the Dutch mobile market*"²⁷⁵. However, Tele2 NL's entry as an MNO also attracted negative press coverage including certain comments which expressed doubts on the ability of Tele2 NL to be a successful fourth MNO, for example when Tele2 NL launched its own network, Business Insider's predecessor Z24.nl stated that

²⁶⁹ Tele2 AB internal documents, [...] See also Tele2 AB internal documents [...].

²⁷⁰ Tele2 NL internal documents, [...].

²⁷¹ See Tele2 NL internal documents, [...].

²⁷² TMNL internal documents, [*further examples stating TMNL's view on the competitive impact of Tele2's entry in the Dutch market*]

²⁷³ See also Bellen article from 30 December 2015, *Tarieven mobiel internet in 4 jaar tijd met 94% gedaald* (available at <https://www.bellen.com/nieuws/tarieven-mobiel-internet-in-4-jaar-tijd-met-94-procent-gedaald>) [ID 3189]. In this respect, Bellen.com explains that in their view the additional available spectrum is a key of the observed decrease in prices from 2011 to 2015.

²⁷⁴ See reply to RFI 26 to KPN, question 25: "*Also at the time of the rollout of the network of Tele2 in 2015, 4G became the key network technology. With it came a huge increase of capacity on the mobile networks, which enabled operators to lower their prices*". [ID 1175]

²⁷⁵ Tele2 NL internal documents, [...].

Tele2 NL's tough language regarding a price war on 4G subscriptions did not bear fruit yet²⁷⁶. Likewise, [...] ²⁷⁷; [...] ²⁷⁸.

(b) *Tele2 NL's mobile-only strategy following its entry as a new MNO*

- (455) On the basis of the evidence in its case file and in particular of its review of the Parties' internal documents, the Commission finds that since its entry on the Dutch market as a new MNO, Tele2 NL has been pursuing a strategy aimed at growing its customer base. Indeed, Tele2 NL has undertaken a number of commercial initiatives with a view to grow its customer base as set out in recitals 456 to 475. Overall, these initiatives have, however, only resulted in a limited growth of Tele2 NL's market share in the relevant market. The Commission also observes that Tele2 NL has recently been less aggressive on the market as [...].
- (456) Tele2 NL's commercial initiatives over time and their impact on Tele2 NL's customer base are described below.
- (457) **2016:** in February 2016, Tele2 NL effectively lowered the price of its SIM-only tariffs by starting to offer its regular subscriptions as SIM-only tariffs²⁷⁹. This move was considered as aggressive by TMNL²⁸⁰.
- (458) In May 2016, Tele2 NL reported that it was recording great performances²⁸¹. [Evidence of strong competition between Tele2 NL, on the one hand, and TMNL and KPN on the other hand]²⁸². This is illustrative of the key role that Tele2 NL played following its entry as MNO in stimulating and fuelling competition in the Netherlands resulting in lower mobile prices and more data for Dutch consumers.
- (459) At the end of 2016, Tele2 NL [Details on Tele2 NL's strong performances at the end of 2016 and anticipated challenges]^{283 284 285 286}.
- (460) As pointed out by the Notifying Party in the Response to the Statement of Objections, the period immediately following the launch of Tele2 NL's MNO operations from October 2015 to April 2016 is a period during which Tele2 NL

²⁷⁶ Z24.nl news article from 28 January 2016, Stoere taal van Tele2 over prijzenoorlog 4G-abonnementen werpt nog geen vruchten af, (available at: <https://www.businessinsider.nl/stoere-taal-van-tele2-over-prijzenoorlog-4g-abonnementenwerpt-nog-geen-vruchten-af-613626/>): "Wij gaan de telecommarkt in Nederland eens goed opschudden met goedkope data-abonnementen, riep Tele2 afgelopen november. Die strategie betaalt zich voorlopig nog niet uit." [ID 3188]

²⁷⁷ Tele2 NL internal document, [...].

²⁷⁸ Telecompaper news article from 28 January 2016, Tele2 NL sees weak mobile customer growth in Q4, sales up 5% (available at <https://www.telecompaper.com/news/tele2-nl-sees-weak-mobile-customer-growth-in-q4-sales-up-5--1125121>) [ID 3190]. See also Omnitele's customer experience investigation, "Mobile Services Customer Experience in the Netherlands", 11 March 2016, accessible at: <https://omnitele.com/2016/customer-experience-netherlands/>): ""Tele2 [NL]'s Achilles heel is the mobile data customer experience, which is hindered by accessibility issues" [ID 3187]; Annex 3(2), Tele2 NL internal document, [...]

²⁷⁹ TMNL's internal documents, [...]

²⁸⁰ TMNL's internal documents, [...].

²⁸¹ Tele2 NL internal documents, [...].

²⁸² Tele2 NL internal documents, [...].

²⁸³ Tele2 internal documents, [...].

²⁸⁴ Tele2 internal documents, [...].

²⁸⁵ MRC means monthly recurring charge and corresponds to charges that are on a customer's bill every month as opposed to non-recurring charge (NRC) which are only one-time expenses.

²⁸⁶ See Tele2 internal documents, [...].

performed particularly well. This strong performance was however not maintained in the period post April 2016 [...].

Figure 18 - Tele2 NL's performances for the period May 2016 to December 2016 in terms of sales

[...]

- (461) With respect to Tele2 NL's financial performances, Tele2 AB's May 2017 [Analysis of Tele2 NL's financial performances. Tele2 NL is generally on an increasing trend. Tele2 NL however remains behind the other MNOs for certain key indicators. Tele2 NL also failed to deliver on certain internal forecasts]²⁸⁷.
- (462) **2017:** Tele2 NL's intention to compete against the other MNOs in 2017 is captured by the name of the strategy that it wanted to put in place: "[...]"²⁸⁸. "[...]"²⁸⁹. Additionally, Tele2 NL mentioned a number of "innovative products" that it intended to launch²⁹⁰ [...]²⁹¹.
- (463) In another internal document, Tele2 NL identified [...]. With respect to this objective, Tele2 NL also stated its intention to "[...]"²⁹².
- (464) [Tele2 NL's analysis of the impact on its business of TMNL's launch of the first unlimited tariffs in the Netherlands]²⁹³.²⁹⁴.
- (465) [Description of actions undertaken by Tele2 NL in reaction to TMNL's unlimited offer]²⁹⁵.
- (466) [Tele2 NL launching an aggressive unlimited data tariff undercutting TMNL by EUR 10]²⁹⁶.²⁹⁷.
- (467) In May 2017, the new tariffs were implemented by Tele2 NL. Tele2 NL's intention to disrupt the market with these new tariffs was expressly spelled out by Jon James (Tele2 NL's CEO) in the briefing pack, which was sent to the press: "*shaking up markets is what Tele2 does. Today we are changing the mobile market in the Netherlands for good - giving customers mobile internet the way it should be*"²⁹⁸.
- (468) Certain analysts, however, expressed doubts on the truly disruptive character of Tele2 NL's unlimited offers and on Tele2 NL's ability to compete with the other MNOs. For example, in a June 2017 report, "[...]"²⁹⁹.

²⁸⁷ Tele2 internal documents, [...].
²⁸⁸ Tele2 NL internal documents, [...]
²⁸⁹ Tele2 NL internal documents, [...]
²⁹⁰ [...].
²⁹¹ Tele2 NL internal documents, [...]
²⁹² Tele2 internal documents, [...].
²⁹³ Tele2 AB internal documents, [...]
²⁹⁴ Tele2 AB internal documents, [...]
²⁹⁵ See Tele2 AB internal documents, [...]
²⁹⁶ Tele2 AB internal documents, [...]
²⁹⁷ Tele2 AB internal documents, [...]
²⁹⁸ Tele2 NL internal documents, "[...]"
²⁹⁹ [...]

- (469) While the launch of Tele2 NL's unlimited offers initially resulted in [...] [The positive effect of Tele2 NL's unlimited offers on sales lasted for a short period of time].³⁰⁰
- (470) In June 2017, Tele2 NL's launched a campaign called "*unlimited 4 all*" whereby all customers on all tariff levels (i.e. 1GB, 5GB and 10GB) would be given one month of free unlimited data. The aim of this campaign was to convince customers currently on lower data bundle to subscribe to unlimited offers³⁰¹. The Notifying Party however reports in the Response to the Statement of Objections that this campaign [Performance of "unlimited 4 all" offer]³⁰².
- (471) In July 2017, Tele2 NL's commercial teams worked on other initiatives³⁰³, however, Tele2 NL's market share in the relevant market remained limited.
- (472) **2018:** Tele2 NL's internal documents illustrate Tele2 NL's recent deteriorating performance. In its Monthly Business Review of April 2018, Tele2 NL [...]³⁰⁴.
- (473) As to the reasons for Tele2 NL's recent performance decline, the Notifying Party puts forward that it is mainly a consequence of: [network related reasons] (ii) shrinking size of the switchers pool; and (iii) higher mobile subscriber churn as a result of recent escalation in the competition exercised by MVNOs and VodafoneZiggo.
- (474) [Tele2 NL's rationale for increasing the price of unlimited by EUR 3/month in April 2018 and creating a new 20GB/month option]³⁰⁵.
- (475) The Commission however notes that Tele2 NL's conduct in 2018, following the signing of the merger agreement, could have been also at least partially motivated by the present proceedings with regard to assessing whether the Transaction is compatible with the internal market.
- (iii) Tele2 NL's network limitations
- (476) Based on the evidence in its file including the additional evidence provided by the Notifying Party in the Response to the Statement of Objections, the Commission observes that Tele2 NL offers lower network quality compared to the other Dutch MNOs.
- (477) Tele2 NL has less spectrum and a smaller network in terms of sites than the other MNOs. [...]Tele2 NL's inferior network translates into lower network quality and [...] For example, in a recent survey conducted by the independent consultancy Brandtracker over the period of March to May 2018, Tele2 NL scored significantly lower than KPN, VodafoneZiggo and TMNL on elements related to brand, proposition, network quality and customer experience. Consumers gave Tele2 NL a score of 17 on "*Good mobile internet network*

³⁰⁰ Response to the Statement of Objections, paragraph 243.

³⁰¹ See <http://www.gsmhelpdesk.nl/nieuws/14454/tele2-geeft-een-maand-onbeperkt-data-cadeau> [ID 2513-14] and <https://forum.tele2.nl/omdat-het-kan-tine-176/unlimited-data-voor-vaste-klanten-65474> [ID 2513-20]

³⁰² Response to the Statement of Objections, paragraph 245.

³⁰³ Tele2 NL internal documents, [...]

³⁰⁴ Tele2 NL internal document, [...]

³⁰⁵ Response to the Statement of Objections, paragraph 719.

coverage" (KPN scored 45, VodafoneZiggo scored 38 and TMNL scored 32)³⁰⁶.

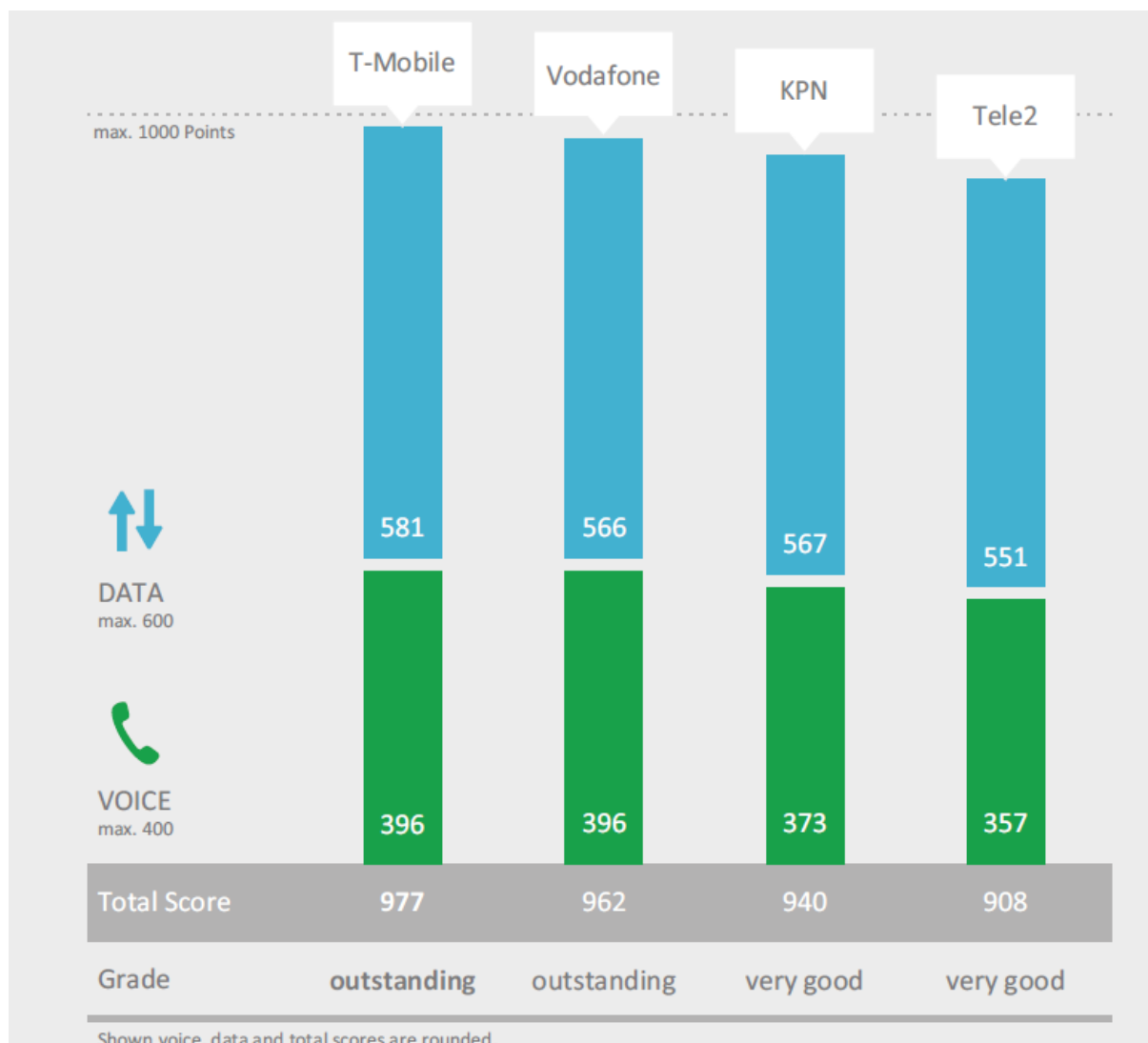
- (478) Moreover, Tele2 NL does not have a 2G or 3G network layer. The Parties describe Tele2 NL [Information on NRA costs incurred on the basis of the agreement with TMNL].
- (479) Overall, due both to the effects [Tele2 NL's NRA costs are expected to decrease significantly]
- (480) However, Tele2 NL's measures to reduce its NRA costs also have a negative effect on network quality³⁰⁷. [...]
- (481) Tele2 NL is already falling behind the remaining MNOs. In the P3 network studies in the Netherlands, taking into account all tested criteria (e.g. data and voice scores), as set out in Figure 19 Tele2 NL is behind the three other MNOs and has lost ground in 2018 compared to 2017 scores³⁰⁸.

³⁰⁶ See Brandtracker, Netherland Attributes, March to May 2018, submitted as Annex 19 (6) to the Notifying Party's response to the Statement of Objections. See also "P3 connect" 2018 mobile network test (<https://www.t-mobile.nl/business/media/pdf/network/netwerk/p3-benchmark-2018-eng.pdf>) [ID 2513-11]: among the four Dutch MNOs, Tele2 NL has the lowest call success ratio, the highest call set-up times and the lowest speed quality. For the data performance in each of the drive and walk tests Tele2 NL has the lowest percentage score of all MNOs. [...]

³⁰⁷ [...]

³⁰⁸ See <https://www.t-mobile.nl/business/media/pdf/network/netwerk/p3-benchmark-2018-eng.pdf>. [ID 2513-11]

Figure 19 – Average download speed in the Netherlands for each MNO



Source: 2018 P3 mobile network test in the Netherlands

- (482) Likewise, as pointed out in the Response to the Statement of Objections, Tele2 NL's most recent network quality perception analysis evidences that [...] ³⁰⁹.
- (483) In addition, Tele2 NL has [...] ³¹⁰.
- (484) The Commission considers that the recent and expected evolution of Tele2 NL's network casts doubts on its current and future ability to grow its customer base while maintaining a sufficiently competitive quality of service.

B. Likely competitive strength of Tele2 NL absent the Transaction

(i) Introduction

- (485) The Commission has investigated whether the competitive strength of Tele2 NL in the retail market for mobile telecommunications services in the

³⁰⁹ See Response to Statement of Objections, paragraph 569.

³¹⁰ See for example [...]

Netherlands, detailed in Section 8.3.2.2.A, would likely change in the absence of the Transaction.

- (486) In this respect the evidence on the file suggests that at least two scenarios are possible: one where Tele2 NL would [continue on the same basis] (Scenario 1) and one where, as submitted by Tele2 NL, Tele2 NL would [not continue on the same basis] (Scenario 2).”
- (487) The Commission considers that based on the evidence on the file, Scenario 1 (Tele2 NL continues [on the same basis]), appears more likely than Scenario 2 (Tele2 NL [does not continue on the same basis]). However, given that in Scenario 2 the competitive strength of Tele2 NL would be weakened even more than in Scenario 1, the Commission does not need to conclude which of the two scenarios is more likely.
- (488) In the following, the Commission will first assess the likely competitive strength of Tele2 NL absent the Transaction in Scenario 1. Second, the Commission will briefly set out the indications suggesting that Scenario 2 is unlikely to be a relevant counterfactual absent the Transaction, but that, in any event, the competitive strength of Tele2 NL absent the Transaction in Scenario 2 would be even weaker.
- (ii) Scenario 1: Tele2 NL will continue to operate on the Dutch market [on the same basis]
- (489) The Commission considers that there are a number of indications suggesting that Tele2 NL will continue to operate in the Dutch market [on the same basis]. However, the competitive strength of Tele2 NL is likely to deteriorate (in particular relative to the competing MNOs), as will be explained in the following.³¹¹
- (490) In order to examine the competitive strength that Tele2 NL is likely to exert absent the Transaction, the Commission has assessed: (i) the feedback from the market investigation; (ii) Tele2 NL's future business and network strategy; (iii) recent market trends; (iv) [capacity issues]; (v) options available to Tele2 NL to increase its network capacity.
- (a) *Feedback of the Market Investigation*
- (491) The opinions expressed by respondents to the Market Investigation have been mixed regarding the expected evolution of Tele2 NL's competitive position in the next two years.
- (492) On the one hand, the majority of non-MNO respondents to the Market Investigation considered that Tele2 NL will continue to exert a significant competitive constraint on its rivals absent the Transaction³¹². In particular with regard to Tele2 NL's unlimited offer, the majority of non-MNOs and distributors responding to the Market Investigation indicated that the offer is

³¹¹ The analysis undertaken by the Commission as regards Scenario 1 would be the same regardless of whether Tele2 NL were to remain controlled by Tele2 AB or acquired by a third party other than the Notifying Party as a going-concern.

³¹² See responses to RFI 23 to non-MNOs of 2 May 2018, questions C.B.5.

commercially sustainable as Tele2 NL's network capacity is sufficient to continue to offer this package for the foreseeable future³¹³.

- (493) However, there have also been more nuanced statements pointing out Tele2 NL's significant need for investment. The MVNO Simpel considers that Tele2 NL will continue to compete, even if it will have to strike the right balance between investment and return on investment: "*Simpel.nl believes that Tele2 in the next two years will have to continue to invest heavily in growing its subscriber base and to limit their dependence on the wholesale agreement with T-Mobile as to offload that traffic onto their own VOLTE network. The costs for subscriber acquisition with VOLTE enabled handsets is costly and Tele2 will have to strike the right balance between growth and making a financial return on their assets.*"³¹⁴.
- (494) The MVNO Youfone considers that the competitive constraint of Tele2 NL will erode in the medium to long term³¹⁵. First, Youfone casts doubt on Tele2 NL's likely future commercial success: "*The saturation of the Dutch mobile market makes it generally difficult for smaller or recently entered MNOs to increase their market share. Tele2 attempts to gain market share by positioning itself as a price fighter and by targeting mid- and lower-segments with a "more-for-less" approach, such as an unlimited data bundle at EUR 25 per month. Tele2 has a relatively low number of subscribers, but processes 15-20% of all mobile data traffic in the Netherlands due to its unlimited data propositions.*" Second, Youfone believes that Tele2 NL will need to purchase spectrum in the upcoming auction to ensure its viability. However, Youfone questions whether Tele2 NL will be willing to participate, in light of significant investments needs, and if it were to participate whether Tele2 NL would be able to compete against TMNL, KPN and VodafoneZiggo.
- (495) VodafoneZiggo states: "*VZ questions whether Tele2 NL's general business model and position in the market would be sustainable for the long term future.*"³¹⁶.

(b) *Commercial and network strategy of Tele2 NL*

- (496) On the basis of the available evidence, the Commission considers that Tele2 NL's internal documents suggest that in the absence of the Transaction, [Tele2 NL's network strategy after the current NSA with TMNL ends]³¹⁷

Figure 20 – Tele2 NL Network Plan

[...]

- (497) To that end, Tele2 NL's internal documents [...]. Moreover, internal documents of Tele2 NL suggest that Tele2 NL's future business prospects on a standalone basis, that is, absent any divestment of some or all of its assets, are likely to remain profitable.

³¹³ See responses to RFI 23 to non-MNOs of 2 May 2018, questions C.B.7.4; see responses to RFI 24 to distributors of 2 May 2018, question 37.

³¹⁴ See Simpel's response to RFI 23 to non-MNOs of 2 May 2018, questions C.B.5 [ID: 2374].

³¹⁵ See Youfone's position paper of 31 August 2018 [ID: 2436].

³¹⁶ See VodafoneZiggo's Reply to RFI, Question 24 [ID: 2779]

³¹⁷ See Annex 5(11)(84) to Form CO, "NL Network Options: Summary", slide 2.

- (498) [Detailed analysis of Tele2 NL's business plans including its network and investment plans]^{318 319 320}.
- (499) [Detailed analysis of Tele2 NL's business plans including its network and investment plans]³²¹.
- (500) [Detailed analysis of Tele2 NL's business plans including its network and investment plans]³²²³²³.
- (501) [Detailed analysis of Tele2 NL's business plans including its network and investment plans]

[Detailed analysis of Tele2 NL's business plans including its network and investment plans]

- (502) [Detailed analysis of Tele2 NL's business plans including its network and investment plans].
- (503) In the Response to the Statement of Objections, [Detailed analysis of Tele2 NL's business plans including its network and investment plans]³²⁴.

[...]

- (504) [Detailed analysis of Tele2 NL's business plans including its network and investment plans]³²⁵.
- (505) The EBITDA minus CAPEX figures presented by the Parties [...] ³²⁶. The Commission notes that those revised figures have been produced in the course of the current investigation and are therefore of limited evidentiary value. Furthermore, if Tele2 NL's commercial performance has slowed down in 2018, this may also be linked to the ongoing merger proceedings, leading to a less aggressive strategy. Indeed, this has also been confirmed in [...] ³²⁷.

(c) *Recent trends*

- (506) In the following, the Commission addressed specific recent trends in the Dutch retail private mobile market which have been brought forward by the Parties as risks threatening the future success and viability of Tele2 NL from a financial or commercial perspective.

FMC

- (507) The Notifying Party argues that the ongoing trend towards FMC decreases the pool of mobile-only customer base upon which Tele2 NL can rely to target new customers.

³¹⁸ See slide 5, Annex 8A (7)(19) to the Form CO.
³¹⁹ See slide 9, Annex 5(11)(36) to the Form CO.
³²⁰ Appendix 1 to Letter to G. Lorient regarding Tele2 NL counterfactual of 27 June 2018.
³²¹ [...]
³²² Tele2 NL internal document [...]
³²³ See slide 76, Annex 5(13)(46) to the Form CO.
³²⁴ See Response to the Statement of Objections, paragraph 511.
³²⁵ Execution copy of SPA, see Annex 3(2) to the Form CO.
³²⁶ See Annex 8A(1) to the Form CO [...].
³²⁷ See Tele2 NL internal documents, [...]

MVNOs

- (508) The Notifying Party argues that MVNO competition has accelerated. The Commission's view as regards the limits to the competitive constraint exerted by MVNO is set out in Section 8.3.5.

WFT regulation

- (509) The Notifying Party argues that the target customer pool is further shrinking due to the unexpected introduction of the newly applicable Dutch consumer credit regulation in May 2017, the WFT, which makes it more difficult to sell handsets on the basis of an instalment plan because customer are required to complete a credit application³²⁸. As a consequence, customers postpone their purchase of a new handset, and, given that the purchase of a new handset often triggers a change of provider, this leads to a reduction in the pool of contestable customers available to Tele2 NL.
- (510) This regulation was anticipated by market players including [...] ³²⁹.

(d) Network situation

- (511) On the basis of the available evidence, the Commission considers that from a network standpoint Tele2 NL's network quality is likely to deteriorate relative to the competing MNOs mainly due to [...]
- (512) The starting point of the Commission's analysis is Tele2 NL's most recent network performance. As set out in recitals 476 to 484, there are already some indications of a deteriorating network quality.
- (513) The Notifying Party submits that Tele2 NL's [network is not future-proof]³³⁰.
³³¹ ³³²
- (514) In this regard, the Commission notes that [...] ³³³. In the Response to the Statement of Objections, the Notifying Party provided further evidence as to [Assessment of the likelihood of Tele2 NL entering in a network sharing absent the Transaction] ³³⁴ ³³⁵.
- (515) The Commission therefore assessed Tele2 NL's network situation assuming that [...]. This means that Tele2 NL will remain in the NSA with TMNL until [...].
- (516) Tele2 NL submits that [...] it will soon meet its capacity ceiling and [...] ³³⁶.

Assessment of capacity issues in the context of Tele2 NL network plans

- (517) [Assessment of capacity issues in the context of Tele2 NL network plans]
- (518) [Assessment of capacity issues in the context of Tele2 NL network plans] ³³⁷.
³³⁸

³²⁸ In relation to the WFT, see recital 42 above.

³²⁹ See Tele2 NL internal documents, [...]

³³⁰ See Article 6(1)(c) Response, paragraphs 164 and 177.

³³¹ See Article 6(1)(c) Response, paragraphs 178.

³³² See Form CO Section 8A.6.1.2.

³³³ See TMNL submission [...]

³³⁴ See Response to the Statement of Objections, Section 3.7.4.

³³⁵ [...]

³³⁶ See Article 6 (1)(c) Response, paragraph 182.

³³⁷ See Response to Statement of Objections, paragraph 567; see Annex 19(17) to 6(1)(c) Response.

- (519) [Assessment of capacity issues in the context of Tele2 NL network plans]³³⁹.
- (520) [Assessment of capacity issues in the context of Tele2 NL network plans]³⁴⁰.
[...]
- (521) [Evidence that Tele2 NL's network plan may not fully prevent capacity issues to occur].
- (522) [Assessment of capacity issues in the context of Tele2 NL network plans]
- (523) [Assessment of capacity issues in the context of Tele2 NL network plans]
- (524) Generally, however, if Tele2 NL were to become capacity constrained, it is likely that this will also have an effect on Tele2 NL's pricing strategy. [...] Therefore, the competitive situation of Tele2 NL is likely to be further aggravated by such [network] costs which will give rise to incentives to price less aggressively³⁴¹.

Options to further increase capacity

- (525) Tele2 NL indicates that it does not have any options to increase its capacity. The Commission therefore has analysed the options available to Tele2 NL to increase its network capacity. As explained by the Notifying Party, there are three means to increase network capacity: higher spectral efficiency, more spectrum or more sites³⁴².

Higher spectral efficiency

- (526) [...]
- (527) The Commission has analysed Tele2 NL's NSA with TMNL and indeed Tele2 NL has very limited rights to employ capacity-enhancing technologies [...]
- (528) The Commission considers that it is plausible that TMNL currently has no incentive to offer improved NSA terms³⁴³. First, [...].
- (529) While the Commission considers that such technologies can still be employed at Tele2 NL's own sites, it acknowledges that such measure does not address potential capacity constraints throughout the network in the short and medium term.
- (530) The Commission concludes that Tele2 NL will not be able to further heavily rely on important spectral efficiency measures to increase its network capacity [...], in particular in light of the fact that capacity issues are to be expected in densely populated urban areas where Tele2 NL relies on shared sites with TMNL.

Spectrum

- (531) Tele2 NL currently has a license to use 10% of spectrum in the Netherlands. In the Response to the Statement of Objections, Tele2 NL clarifies that its share of data traffic is higher than its subscriber market share would suggest.

³³⁸ Annex 19(17) to Article 6(1)(c) Response.

³³⁹ See Annex 5(11)(21) to Form CO, [...]

³⁴⁰ See Annex 5(11)(23) to Form CO, [...]

³⁴¹ For further details, please see Annex A.

³⁴² See TMNL submission, [...]

³⁴³ See RFI 61 to TMNL; see RFI 62 to Tele2 NL.

According to a recent ACM analysis, "Tele2 NL's share based on data consumption in the Netherlands rose from 5-10% to 15-20% in 2017"³⁴⁴.

- (532) Tele2 NL submits that it will not [obtain spectrum in the 2019 spectrum auction]^{345 346}.
- (533) [Commission's assessment of whether Tele2 NL could increase capacity by deploying and/or acquiring more spectrum]
- (534) [Commission's assessment of whether Tele2 NL could increase capacity by deploying and/or acquiring more spectrum]³⁴⁷.
- (535) [Commission's assessment of whether Tele2 NL could increase capacity by deploying and/or acquiring more spectrum]
- (536) The ACM also confirmed that no spectrum reservation for Tele2 NL is foreseen in the 2019 auction (as also set out in the ACM's "Advies Multibandveiling 2019") and that "*Considering the amount of spectrum being auctioned in the 700 MHz band, a likely scenario would be that only three players will acquire 5G-spectrum in the upcoming auction, regardless of Tele2 NL's participation*"³⁴⁸.
- (537) [...]. The proposed European Electronic Communications Code which calls for spectrum in the 3.4-3.8GHz band to be made available by the end of 2020³⁴⁹ and there is a motion in the Dutch Second Chamber calling upon the government to accelerate the availability of spectrum in the 3.5 GHz band³⁵⁰ and the various options to do so which have already been identified by the Government³⁵¹. However, the exact timing of the auction remains uncertain as the concerned spectrum band is currently in use for national security satellite applications in the Netherlands³⁵². After the auction has taken place, a further delay can be expected until the spectrum becomes available, is ready-for-use and rolled-out. [...].
- (538) The Commission concludes that Tele2 NL is not likely to acquire spectrum in the upcoming 2019 auction due to: (i) the limitations under its current NSA with TMNL; and (ii) [...]. This is reflected in Tele2 NL's business and network plans [...].

Sites

- (539) Tele2 NL submits that it has fewer sites than other Dutch operators [...], whilst other MNOs networks in the Netherlands have a site base of about 4 500 to 5 000 sites³⁵³.
- (540) The Parties submit that it has become increasingly difficult to find site locations for the installation of new antennas. As reasons for the shortage of

³⁴⁴ See Response to Statement of Objections, paragraph 419.

³⁴⁵ In addition, 1.4 GHz and 2.1 GHz spectrum will be auctioned in 2019. However, [...].

³⁴⁶ See Response to Statement of Objections, paragraph 514.

³⁴⁷ See [...].

³⁴⁸ ACM Position Paper, p. 14 [ID 2427].

³⁴⁹ See http://europa.eu/rapid/press-release_IP-18-4070_en.htm (retrieved on 6 September 2018) [ID 2513-06].

³⁵⁰ <https://zoek.officielebekendmakingen.nl/kst-24095-427.html> [ID 2513-07]

³⁵¹ <https://zoek.officielebekendmakingen.nl/dossier/24095/kst-24095-438> [ID 2513-23]

³⁵² See TMNL's [...].

³⁵³ [...].

available sites, Tele2 NL is referring to specific rules relating to monuments, environmental laws as well as increasing opposition of residents and building owners (see Section 6.3.1.6.A above).

- (541) In this respect, as explained in Section 6.3.1.6.A, whilst there may be increasing difficulties, the Commission considers that there are no prohibitive restrictions hindering Tele2 NL (or any other operator) from building new sites. The Ministry of Economic Affairs and Climate Policy's Connectivity Action Plan highlights the advantages of having four fast mobile 4G networks and stresses that preconditions must be in place to ensure sufficient investment in the further expansion of existing and new connectivity. The report acknowledges the increasing challenges, but also defines concrete actions to be taken by central government to facilitate future infrastructure expansion³⁵⁴. Therefore, the Commission concludes that Tele2 NL would also be able to replace a part of shared sites with TMNL [...].
- (542) The Commission nevertheless acknowledges that [any network migration by Tele2 NL] is linked with certain difficulties, [...].
- (543) First, Tele2 NL's investment to replace currently shared sites will not necessarily improve its network quality and coverage, but merely aim to maintain its current network quality and coverage. In parallel and as foreseen, Tele2 NL will have to make additional investments to: (i) expand the number of sites for additional capacity and coverage; (ii) employ capacity-enhancing technologies; and (iii) acquire additional spectrum to eventually enhance its network quality and coverage. Tele2 NL's financial and operational planning [...]
- (544) Second, network rollout costs and in particular incremental costs for building capacity sites will be higher in case of an independent network compared to passive network sharing. [...] ³⁵⁵. [...] ³⁵⁶. [...] ³⁵⁷. Irrespective of the exact number of required sites, the Commission considers that higher incremental costs for capacity (compared to a passive sharing scenario) may translate into higher prices to consumers (see recital 524) or into lower network quality, both compromising the competitive strength exerted by Tele2 NL.
- (545) Therefore, whereas Tele2 NL will be able to invest in additional sites, the incremental costs for additional sites will be higher than is currently the case in the context of the NSA with TMNL.
- [*Negative impact from rollout of capacity increasing technologies by TMNL*]
- (546) [...]
- (547) In this regard, the Commission notes that some factors are mitigating negative consequences to Tele2 NL [...] ³⁵⁸. [...] ³⁵⁹. [...] ³⁶⁰.

³⁵⁴ Ministry of Economic Affairs and Climate Policy, Connectivity Action Plan, 2018, available at <https://www.government.nl/documents/reports/2018/07/13/connectivity-action-plan> [ID 2190].

³⁵⁵ See Tele2's response to RFI 78, Annex 8.

³⁵⁶ Response to the Statement of Objections, paragraph 561.

³⁵⁷ See Tele2's response to RFI 78, Annex 13.

³⁵⁸ See Tele2's response to RFI 62, question 2 [ID 1339].

³⁵⁹ See TMNL submission, [...].

³⁶⁰ See Tele2 NL's reply to RFI 62, question 2 and Annex2(d), Addendum 6 to NSA.

- (548) [Nevertheless, the rollout of capacity increasing technologies by TMNL is likely to have some impact on Tele2 NL's network quality and coverage]³⁶¹.
- (549) [Discussion on other capacity-enhancing technologies whose roll-out could have negative consequences for Tele2 NL]³⁶².³⁶³..
- (550) If TMNL starts employing additional capacity-enhancing technologies and/or [...], Tele2 NL may have to respond by accelerating its migration to a wholly-owned network (see recitals 496 to 497).

Future network performance of competing MNOs

- (551) The Commission notes that the other Dutch MNOs are likely to improve their network quality in the coming years, as set out in recitals 552 to 553. Even if Tele2 NL were not to face reductions in download speeds, Tele2 NL's network performance is likely to deteriorate in relative terms compared to the other MNOs [...]. Hence, [...] its MNO competitors are expected to improve their network quality compared to that of Tele2 NL.
- (552) TMNL describes its network strategy as follows: "[...]"³⁶⁴. [...]"³⁶⁵. [...]"³⁶⁶. Overall, [...]
- (553) Likewise, the Commission notes that KPN and VodafoneZiggo are expected to acquire spectrum in the 2019 auction and to continue to invest in their networks. For instance, VodafoneZiggo states that KPN, T-Mobile and itself are in a fierce competition on network quality: "*As regards network quality innovation, it should be noted that KPN and VodafoneZiggo were the first MNOs to roll out 4G network and services, well ahead of the Parties. Moreover, investments in network infrastructure and the acceleration of the implementation of the 4G network have mainly been the result of fierce competition between KPN, VodafoneZiggo and TMNL, and have not necessarily been induced by the entry of Tele2 NL as the fourth MNO*"³⁶⁷.

5G

- (554) As regards Tele2 NL's claim that it would need to upgrade its network to 5G, the Commission considers, in line with the ACM³⁶⁸, that all operators wishing to deploy 5G will need to make investments in the future. It cannot be determined on what basis or following what business model this may take place as much will depend on measures by regulators, who under the proposed new European Electronics Communications Code will likely have enhanced powers to facilitate 5G network rollout³⁶⁹. However, the Commission acknowledges that Tele2 NL's delayed investment in 5G technology could further widen the gap between Tele2 NL's and other MNOs' network quality and coverage.

³⁶¹ See Response to the Statement of Objections, paragraph 425ff.

³⁶² See TMNL submission, [...].

³⁶³ See Response to Statement of Objections, paragraph 428.

³⁶⁴ TMNL submission [...].

³⁶⁵ See Response to Statement of Objections, paragraph 418.

³⁶⁶ TMNL submission [...].

³⁶⁷ VodafoneZiggo's observations on the Statement of Objections, p. 2f.

³⁶⁸ See ACM Position Paper, p. 15 [ID 2427].

³⁶⁹ See http://europa.eu/rapid/press-release_IP-18-4070_en.htm (retrieved on 6 September 2018).

- (iii) Scenario 2: Tele2 NL will stop operating on the Dutch market [on the same basis]
- (555) On 27 June 2018 the Notifying Party submitted a presentation showing that Tele2 AB's board had decided to commit to a so-called "Plan B" for its Dutch operations in the event that the Transaction would not materialise. The Plan B envisages that, should the Transaction between TMNL and Tele2 NL not go through: [...] ³⁷⁰.
- (556) The Commission considers that the Plan B presented by Tele2 NL is of low evidentiary value. The Tele2 AB board approved the so-called Plan B in May 2018 and Tele2 NL submitted this plan to the Commission in June 2018 as part of the Article 6(1)(c) Response. Given the timing of the production of this document, the Commission notes that it is highly uncertain whether Plan B was developed in Tele2 NL's usual course of business or with a view to produce helpful evidence in order to obtain merger clearance. In fact, the evidence on the Commission's file, presented in recitals 557 to 563, suggests that Plan B has been drawn up in the context of the current merger investigation.
- (557) First, Tele2 NL developed Plan B towards the end of the Commission's first phase investigation when it became clear that the Commission would open a second phase investigation. Plan B was approved by the Tele2 AB board in time to provide it to the Commission as part of the Article 6(1)(c) Response.
- (558) Second, Tele2 NL submitted a new variant of Plan B as part of the Response to the Statement of Objections. [...] ³⁷¹. [...] ³⁷². [...] ³⁷³. Hence, Tele2 NL adjusted its alleged business plans both according to the Article 6(1)(c) Response, as well as in Response to the Statement of Objections.
- (559) Third, Tele2 NL's internal documents do not provide convincing evidence on the genuineness of Tele2 NL's alleged Plan B or [...] ³⁷⁴. [...] ³⁷⁵.
- (560) Fourth, [...] ³⁷⁶. [...]
- (561) Fifth, [...] ³⁷⁷. [...]
- (562) [...] ³⁷⁸.
- (563) Sixth, as explained in recital 496 above, the Commission considers that [...]. Hence, Tele2 NL was on track to implement a long-term strategy [to continue competing in the Dutch market on the same basis]. The presented dramatic shift in strategy is not in line with the contemporaneous documents originating from the period shortly before the signing of the Transaction.
- (564) Therefore, the Commission does not consider it likely that, absent the Transaction, Tele2 NL would stop operating [on the same basis]. In any event, the Commission notes that, as the Transaction does not result in an impediment

³⁷⁰ See Tele2 NL submission, Plan B, 27 June 2018.

³⁷¹ See Response to Statement of Objections, paragraph 86.

³⁷² See Plan B, slide 3.

³⁷³ See Plan B, slide 7.

³⁷⁴ See RFI 78.

³⁷⁵ See RFI 78, question 20.

³⁷⁶ See for example the following Tele2 internal documents: ID: 1707-23321, Filename: T2_00572406; ID: 1707-23351, Filename: T2_00572436; ID: 1707-34301, Filename: T2_00583386 ; ID: 1085-65861, Filename: T2_00245860; ID: 1085-72437, Filename: T2_00252436.

³⁷⁷ See Response to Statement of Objections, paragraph 499.

³⁷⁸ See RFI 78, Annex 21.

of effective competition even if Tele2 NL continues operating [on the same basis], the Commission does not need to conclude on whether Tele2 NL will actually continue operating [on the same basis].

(iv) Conclusion on competitive strength of Tele2 NL

- (565) Based on the above elements, the Commission concludes that, in the framework of the forward looking analysis which has to be carried out under the Merger Regulation, Tele2 NL cannot be considered an important competitive force within the meaning of paragraphs 37 – 38 of the Horizontal Merger Guidelines on the retail mobile telecommunications market in the Netherlands in light of: (i) its limited market share; (ii) its competitive behaviour and performance; (iii) its network limitations; and (iv) the fact that even though it is likely that Tele2 NL would continue operating [on the same basis] in the Dutch market in the absence of the Transaction, its competitive strength will likely deteriorate. As the Transaction does not result in an impediment of effective competition even if Tele2 NL continues operating [on the same basis] the Commission does not need to conclude on whether Tele2 NL will actually continue operating [on the same basis].

8.3.3. *Competitive strength of KPN*

8.3.3.1. Notifying Party's views

- (566) The Notifying Party submits that KPN is an extremely strong competitor in the Netherlands. It submits that KPN would constrain the merged entity post-Transaction both offering mobile as a standalone product and as part of an FMC bundle.
- (567) The Notifying Party submits that KPN's strategy in the Dutch market has primarily been focused on offering FMC bundles. The Notifying Party argues that an increase in customers jointly purchasing fixed and mobile telecommunication services as part of an FMC bundle, principally from KPN and VodafoneZiggo, represents a paradigm shift in the market such that the Parties as standalone entities, unable to offer FMC bundles, would not be able to compete. The Notifying Party argues that this is because: (i) the pool of contestable customers is ever decreasing as customers that purchase mobile as part of an FMC bundle are less likely to churn; and (ii) that mobile telecommunications services sold by KPN and VodafoneZiggo in an FMC bundle are considered to be the discounted element resulting in significant downward pressure on mobile prices across the whole market.

8.3.3.2. Commission's assessment

- (568) As mentioned in Section 6.3.1.1, KPN is currently the largest MNO both by revenues and subscribers in the Dutch mobile market, and has considerable activities serving both private and business customers.
- (569) The Market Investigation has confirmed that KPN competes on the mobile market both with a standalone mobile product and by mobile sold as part of an FMC bundle.
- (570) When selling mobile in a bundle with fixed services, KPN customers currently receive the following advantages, both a financial discount and a so-called positive discount where additional products are included:
- Double amount of data, SMS and call minutes,

- EUR 5 discount on each mobile subscription,
 - Free calling within the same household,
 - Sharing Mb within the same household, and
 - Choice of 1 Free television package (FOX Sports or Films&Extra Channels)
- (571) Telfort, KPN's main secondary brand, has approximately 1.55 million customers³⁷⁹ and Simyo has approx. 465 000 customers³⁸⁰. Telfort therefore has a larger customer base than Tele2 NL which in 2017 had 1.2 million subscribers. The results of the Market Investigation indicate KPN currently competes aggressively on the market with these brands³⁸¹.
- (572) KPN has a national 2G, 3G and 4G network and as detailed in Table 1 above, 28.6% of the spectrum currently licenced for mobile telecommunications use in the Netherlands. The Commission's investigation indicates that KPN has a high quality mobile network in the Netherlands. According to P3's ranking³⁸², KPN ranks third in terms of overall network quality when comparing all four Dutch MNOs, but is still awarded a high score and described as showing excellent results. KPN scores 90% or above in on all parameters measured by P3. KPN ranks joint second (with VodafoneZiggo) for data performance in large Dutch cities and ranks second for data performance in cities and towns.
- (573) This quality network translates into a perception in the market that KPN has a strong network. In response to the Market Investigation, on average, respondents rated KPN 4.4 out of 5 with regard to network reliability and coverage and 3.9/5 with regard to download speed³⁸³.

8.3.3.3. Conclusion

- (574) In conclusion, given its strong market position and good network quality, the Commission considers that KPN is an important competitor on the retail telecommunications market in the Netherlands, both by offering mobile as a standalone product, but also included in a bundle with fixed services. There is no evidence on the Commission's file to indicate that KPN will not continue to be an important competitor in the future.

8.3.4. *Competitive strength of VodafoneZiggo*

8.3.4.1. Notifying Party's views

- (575) The Notifying Party submits that VodafoneZiggo is an extremely strong competitor in the Netherlands. It submits that VodafoneZiggo would constrain the merged entity post-Transaction both offering mobile as a standalone product and as part of an FMC bundle.

³⁷⁹ Telecompaper report, Dutch Mobile Virtual Operators Profiles Binder 2017 Q3, 22 December 2017, p. 58.

³⁸⁰ Telecompaper report, Dutch Mobile Virtual Operators Profiles Binder 2017 Q3, 22 December 2017, p. 48

³⁸¹ See responses to RFI 53 to non-MNOs of 11 July 2018, question 14 and RFI 58 to VodafoneZiggo of 16 July 2018, question 8 [ID 1785].

³⁸² See responses to RFI 53 to non-MNOs of 11 July 2018, question 14 and RFI 57 to KPN of 16 July 2018, question 8.

³⁸³ See responses to RFI 23 to non-MNOs of 2 May 2018, questions C.B.1. and RFIs 26 and 27 to KPN and VodafoneZiggo of 2 May 2018, question 20 [ID 1175, 2235]

- (576) The Notifying Party's view set out above in recital 566 - 567 with regard to competition from FMC bundles are equally applicable to mobile sold in a bundle by VodafoneZiggo. In particular, it submits that following completion of the joint venture between Vodafone and Ziggo in 2016, it has been particularly competitive in cross selling between the two customer bases.
- (577) The Notifying Party submits that VodafoneZiggo also competes by selling mobile as a standalone product, competing both with its main Vodafone brand but also with its second, fighting brand Hollandsnieuwe. The Notifying Party submits that this sub-brand allows VodafoneZiggo to differentiate its services to attract more competitive price customers that typically are not interested in an FMC offer.

8.3.4.2. Commission's assessment

- (578) As mentioned in Section 6.3.1.2, VodafoneZiggo is currently the second largest MNO both by revenues and subscribers in the Dutch mobile market, has considerable activities serving both private and business customers.
- (579) The Market Investigation has confirmed that VodafoneZiggo competes on the mobile market both with a standalone mobile product and by mobile sold as part of an FMC bundle. When selling mobile in a bundle with fixed services from VodafoneZiggo, customers currently receive the following advantages:
- Double data bundle;
 - EUR 5 including VAT (EUR 4.13 excluding VAT) monthly discount on mobile bill for customers that have a 'Red' plan or higher;
 - Additional television package free of charge. Customers can choose between the following television packages: 'Ziggo Sport Totaal' (normally priced at EUR 14.95 incl. VAT (EUR 12.36 excl. VAT) per month), 'Ziggo Movies en Series L', or 'Ziggo Kids' (not available as standalone products);
 - 'Safe online XL' internet security package which enables customers to safely secure up to 20 devices (normally priced at EUR 6.95 incl. VAT (EUR 5.74 excl. VAT) per month).
- (580) VodafoneZiggo's second brand, Hollandsnieuwe has a material market position with 585 000 subscribers³⁸⁴. The results of the Market Investigation indicate VodafoneZiggo currently competes aggressively on the market with this brand.
- (581) VodafoneZiggo has a national 2G, 3G and 4G network and as noted in Table 1, 32.1% of the spectrum currently licenced for mobile telecommunications use in the Netherlands. VodafoneZiggo competes by selling mobile subscriptions both as a standalone product as well as bundled with its fixed services including fixed internet, fixed line and/or television.
- (582) The Commission's investigation indicates that VodafoneZiggo has a high quality mobile network in the Netherlands. According to P3³⁸⁵, VodafoneZiggo ranks second in terms of overall network quality when

³⁸⁴ Telecompaper report, Dutch Mobile Virtual Operators Profiles Binder 2017 Q3, 22 December 2017, p. 22.

³⁸⁵ <https://www.t-mobile.nl/business/media/pdf/network/netwerk/p3-benchmark-2018-eng.pdf>. IID 2513-111

comparing all four Dutch MNOs; it is awarded a high score (90% or above according to all parameters) and is described as showing excellent results. P3 notes in particular that VodafoneZiggo performs particularly well in cities and towns.

- (583) This quality network translates into a perception in the market that VodafoneZiggo has a strong network. In response to the Market Investigation, on average, respondents rated VodafoneZiggo 3.9 out of 5 with regard to network reliability and coverage and 3.8/5 with regard to download speed³⁸⁶.

8.3.4.3. Conclusion

- (584) In conclusion, given its strong market position and good network quality, the Commission considers that VodafoneZiggo is an important competitor on the retail telecommunications market in the Netherlands, both by offering mobile as a standalone product, but also included in a bundle with fixed services. There is no evidence on the Commission's file to indicate that VodafoneZiggo will not continue to be an important competitor in the future.

8.3.5. *Competitive strength of MVNOs*

8.3.5.1. Notifying Party's views

- (585) The Notifying Party submits that MVNOs are an important competitive constraint on MNOs in the Dutch market. The Notifying Party submits that MVNOs do not just target niche segments but address the mass market and are particularly competitive in the private segment. According to the Notifying Party, MVNOs offer a broad range of subscriptions (postpaid and prepaid; SIM-only and with handsets) and increasingly compete on subscriptions with big data bundles. The Notifying Party observes that the combined subscriber base of the 35 active MVNOs in the Dutch market is an equivalent size to TMNL and that the largest MVNO, Lebara has a subscriber base almost equivalent to Tele2 NL. The Notifying Party further notes that Simpel has been strongly growing its consumer base in the recent months and that some MVNOs, such as Robin Mobile, offer unlimited data packages. The Notifying Party argues that, post-Transaction, the merged entity will continue to be subject to competitive pressure from MVNOs.
- (586) In the Article 6(1)(c) Response, the Notifying Party mainly focusses on competition from two Dutch MVNOs, i.e. Youfone and Simpel. According to the Notifying Party, these fiercely compete with their no-frills MVNO brands for the highly price-sensitive part of the customer base. More generally, the Notifying Party submits that the rates offered by MVNOs for data bundles up to 10 GB are lower than those of MNOs and that MVNOs increasingly compete on data bundles larger than 10 GB. Moreover, the Notifying Party highlights the significant gross adds' share of Dutch MVNOs, standing at 37% in the overall market for retail mobile telecommunications services and at 44% in the private segment in Q3 2017.
- (587) Where relevant, the Commission will supplement its analysis of the competitive strength of the MVNOs by an analysis of the arguments brought forward by the Notifying Party in the Response to the Statement of Objections.

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See responses to RFI 23 to non-MNOs of 2 May 2018, questions C.B.1. and RFIs 26 and 27 to KPN and VodafoneZiggo of 2 May 2018, question 20 [ID 1175, 2235]

- (588) The Notifying Party submits that the Commission's analysis is contradictory to its decision in *Vodafone / Liberty Global / Dutch JV* where the Commission observed that the joint venture would continue to face a competitive constraint from a number of large MVNOs. The Commission notes that *Vodafone / Liberty Global / Dutch JV* involved the elimination of the competitive constraint of an MVNO (Ziggo) from the market whereas this case involves the assessment of the elimination of the competitive constraint from a MNO. The factors relevant to the analysis are therefore different and no contradiction arises.

8.3.5.2. Commission's assessment

A. *Types of MVNOs*

- (589) The Commission, based on the results of the Market Investigation and the analysis of the internal documents of the Parties, does not consider that MVNOs are able to exercise the same degree of competitive pressure that is exercised by MNOs. The Commission therefore considers that MVNOs are unable to meaningfully constrain the competitive behaviour of MNOs on the market for retail mobile telecommunication services.
- (590) This view is shared by the ACM which notes in its submission to the Commission that: "*The ACM agrees with the assessment of the Commission that MVNOs currently lack the ability to exert the same competitive pressure as an MNO, because MVNOs depend on wholesale access conditions of their host MNO.*"³⁸⁷.
- (591) As mentioned in Section 6.3.2, there are different types of MVNOs in the Netherlands³⁸⁸.
- (592) In terms of network assets and infrastructure, it is possible to differentiate between full and light MVNOs³⁸⁹.
- “Full MVNOs” usually own some of the core network infrastructure, issue their own SIM cards, have network codes and back-office functions to manage customer relations. They use MNOs for access to a radio network only.
 - “Light MVNOs” (which also includes service providers) own/operate their own CRM systems, managing sales, marketing, product configuration, billing/rating and customer service, while the host MNO provides all bearer, enabler and mediation services and manages network provisioning, call routing and termination. Light MVNOs distribute SIM cards and offer services under their own name (i.e. repackage the host MNO’s mobile telephony services and sell it under their own brand). They generally do not own any of the core network infrastructure and rely fully on the infrastructure of the host MNO to provide retail mobile service.

³⁸⁷ ACM Position Paper, p.9 [ID 2427].

³⁸⁸ This section refers only to independent MVNOs and does not take into account MVNOs which are wholly or partially owned by the MNOs. For example there are low price brands of MNOs (such as Ben for TMNL and Hollandsnieuwe for VodafoneZiggo). As these are 100% owned and fully controlled by MNOs, they do not introduce any additional competition on the market, or place an additional constraint on the MNOs. They are a means of price discrimination so that MNOs do not have to stretch their brands into the value part of the market.

³⁸⁹ See Form CO, paragraph 512.

- (593) In the Netherlands, the large majority of MVNOs are light MVNOs³⁹⁰. The only notable exceptions are the MVNO Lycamobile and the MVNO TruPhone, however, TruPhone is not active in the private segment.
- (594) In addition, several MVNEs are active in the Netherlands. MVNEs negotiate wholesale access with MNOs and offer these services together with other services, such as traffic clearing, billing, and customer support to MVNOs, in particular to smaller MVNOs. Some MVNEs have their own core networks, however, MVNEs act as intermediaries between MVNOs and MNOs and do not compete on the market for retail mobile telecommunication services³⁹¹. Only few market players, such as Voiceworks, are active both as MVNO as well as MVNE, however, only in the business segment and not in the private segment.
- (595) In terms of profile and target customer groups, it is possible to differentiate between MVNOs focussing on private prepaid, private postpaid and business customer groups. MVNOs are rarely active in several segments and none of the MVNOs present in the Dutch market is active across all market segments. Besides the MVNOs targeting the business segment, the following types of MVNOs can be distinguished in the private segment:
- Mass-market MVNOs, such as Simpel or Youfone, offer no-frills subscriptions for the low and mid budget segment and do not target particular niche customers.
 - Niche MVNOs target certain niche customers which represent in many cases a small proportion of the overall mobile market. Typical examples of niche operators are Lebara and Lycamobile, which centre their offer on low-cost international calls and target immigrant and other customers who make a relatively large share of their calls to other countries.
 - MVNOs originating from other industries have the main focus of their business activity in another industry and utilise their existing customer base and retail distribution network to offer, mostly prepaid, mobile services. This type includes for instance AH Mobiel, Aldi Talk, HEMA or Kruidvat Mobiel.
- (596) Mass-market MVNOs are the strongest type of MVNO in the Netherlands. Simpel and Youfone have been the only MVNOs which have been able to capture a non-marginal share of subscribers in the postpaid private segment.
- (597) Niche MVNOs impose a weak constraint on MNOs. Many of these specialise in serving parts of the market which are either difficult to address for MNOs (such as international communities) or which MNOs are less interested in serving directly (for example, low revenue prepaid customers). A proportion of the customers of these providers will be generated by the MVNOs in customer segments that would otherwise go unserved. Niche MVNOs are typically focussed on the prepaid segment. Even if they would want to expand their business to other segments of the market for retail mobile telecommunication services, they may be an unattractive alternative from the point of view of the customer.

³⁹⁰ See Annex 7(1) to the Form CO; see responses to RFI 23 to non-MNOs of 2 May 2018.

³⁹¹ See Form CO, paragraph 516.

- (598) The MVNOs originating from other industries also impose a weak competitive constraint on MNOs. While these MVNOs have a strong brand name and good distribution network, they typically do not offer postpaid propositions or handsets. In addition, the success of their mobile subscriptions is linked to the success and the visibility of their already existing main business. Moreover, the mobile business is not their main focus with the consequence that the offered mobile propositions receive little attention, are undifferentiated, and do not get adapted to market developments in a timely manner³⁹². Many of these retail MVNOs specialise in serving low revenue prepaid customers. For instance, the MVNO Jumbo, linked to the supermarket chain of the same name, explains: "*our brand is in the market to give our customers the comfort of using a famil[i]ar brand for their pre-paid use. we are not in this market to play a big role or to compete with the big companies like t-Mobile, Vodafone. our pre-paid brand is simply too small for that. also pre-paid is not our core business within Jumbo*"³⁹³. Not only Jumbo, but none of the retail MVNOs has managed to capture a significant market share. MVNO HEMA confirms that it does not compete in the same market segment as its host MNO but rather in certain niche segments only³⁹⁴.
- (599) MVNOs specialising in serving business customers, such as Voiceworks, Intercity or Galaxy, have a marginal position in the business segment. In addition, they impose a weak competitive constraint in the private segment as they cannot easily start to supply private customers. The majority of non-MNO respondents indicate that this would only be possible with considerable time and effort due to different sales channels and customer care requirements as well as contractual negotiations with the host MNO³⁹⁵.
- (600) MVNOs have a relatively high market share in the Netherlands when compared to other mobile telecommunications markets in the EU. According to the data submitted by the Notifying Party (see Table 3 in Section 8.2.2.1), MVNOs had a cumulative market share of [10-20]% in terms of subscribers and [5-10]% in terms of revenues in 2017 in the market for retail mobile telecommunication services. In the private segment, MVNOs' combined share is even higher, however, there is large difference between the prepaid and postpaid segments. While MVNOs have a cumulative share of [40-50]% of subscribers and [60-70]% of revenues in the prepaid segment, they account for [5-10]% of subscribers and [0-5]% of revenues in the postpaid segment only. Hence, MVNOs in the Netherlands have a clear focus on the prepaid segment with a weak presence in the postpaid segment.
- (601) The Notifying Party points out that the gross adds' share of Dutch MVNOs is significant and higher than that of any single MNO showing that MVNOs "*act as a significant competitive force*" in the Dutch mobile retail market³⁹⁶. According to the market share data provided by the Notifying Party, in 2017, the gross adds' share of Dutch MVNOs was [30-40]% in the overall retail market and [40-50]% in the private segment.

³⁹² See Article 6(1)(c) Response, Annex 7, Telecompaper, Dutch MVNO profiles 2017 Q3.

³⁹³ See Jumbo Supermarkten BV's response to RFI 23 to non-MNOs of 2 May 2018, question C.C.2.1 [ID 505].

³⁹⁴ See HEMA's response to RFI 53 to non-MNOs of 11 July 2018, question 20.1.1 [ID 1634].

³⁹⁵ See responses to RFI 53 to non-MNOs of 11 July 2018, question 4.

³⁹⁶ See Article 6(1)(c) Response, paragraph 309.

- (602) First, for the reasons set out in recitals 607 to 622 below, the Commission does not consider that the MVNOs taken together, currently exercise the same level of competitive pressure on the market as the MNOs.
- (603) Second, comparing the market share (or gross add share) of one company with the collective share of a number of other firms has no clear interpretation. Even less so the comparison between the share of an MNO and the share of a heterogeneous collection of MVNOs with different business strategies and customer focuses.
- (604) Third, given MVNOs' stable market share and high gross add share, it is clear that MVNOs exhibit a significant level of churn which is higher than any of the MNOs' churn rates. For example, from 2016 to 2017, while MVNOs had a combined gross add share of [30-40]% in the Dutch retail market (and [40-50]% in the private segment), their combined market share decreased³⁹⁷.
- (605) Fourth, MVNOs' gross adds occurred almost exclusively in the prepaid segment. In the postpaid segment, MVNOs had gross add shares which are merely in line with its subscriber share. In 2017, a subscriber share of [5-10]% was accompanied by a gross add share of [5-10]% while in Q1 2018, with a subscriber share of [5-10]%, MVNOs gained [5-10]% of gross adds only. Hence, the analysis of MVNOs' gross adds confirms their weak position in the postpaid segment.
- (606) Furthermore, a more detailed analysis of the MVNOs' gross add share based on the Commission's market reconstruction³⁹⁸ shows that in the prepaid segment, the MVNOs having by far the largest share in terms of gross adds are niche players which focus on low cost international calls and target migrant workers and, based on their business strategy followed to date in the Netherlands as well as in other EU countries, unlikely to appeal to the mass market. It seems therefore clear that they do not represent a direct competitive constraint to the MNOs.

B. Specific MVNOs

- (607) With regard to **Lebara and Lycamobile**, the Market Investigation, third party reports and the analysis of the internal documents of the Parties confirmed that while these competitors are aiming to broaden their customer range, they continue to mainly focus on the ethnic segment.
- (608) First, the majority of non-MNO respondents indicated that Lebara and Lycamobile are niche ethnic players that do not effectively compete with MNOs³⁹⁹.
- (609) Second, third party reports, such as a recent Telecompaper report, confirm that these players continue to focus on the ethnic segment⁴⁰⁰:

³⁹⁷ As the Notifying Party pointed out in the Response to the Statement of Objections (paragraph 895), the decrease in MVNOs' combined market share from 2016 to 2017 is at least partially caused by the elimination of the independent MVNO Ziggo following the implementation of *M.7978 – Vodafone/Liberty Global/Dutch JV*.

³⁹⁸ The Notifying Party did not submit gross add shares on company level for MVNOs.

³⁹⁹ See responses to RFI 23 to non-MNOs of 2 May 2018, question C.C.4.

⁴⁰⁰ See Article 6(1)(c) Response, Annex 7, Telecompaper, "Dutch MVNO profiles 2017 Q3", pages 33 and 36.

- Lebara: *"There is a focus on migrant groups, in particular those who require contact with their home country, such as temporary foreign workers, international students and expats. Lebara mainly targets the Turkish, Antillean, Moroccan, Surinamese and Polish segments, out of a total potential market of around 3.5 million people."*
 - Lycamobile: *"The main target groups are national customers and people from India, Pakistan, Nigeria, Turkey, Suriname, Morocco and the Antilles, as well as Poland and China. It has recently extended its focus outside of the ethnic segment after launching national bundles and accompanying promotions."*
- (610) Third, the Parties' internal documents contain many references to the ethnic players Lebara and Lycamobile, while their alleged move to the mass market is discussed very little. For instance, TMNL's wholesale update summarises the position of the largest MVNOs as follows: *"Lebara, Lyca (Ethnic) and Simpel (no frills), with ~70% sim segment share (post- and prepaid)"*⁴⁰¹. The Commission has not identified any documents which discuss Lebara and Lycamobile as significant competitive threats.
- (611) [Information on TMNL's negotiations with a potential MVNO customer]⁴⁰².
403 404
- (612) The Notifying Party stresses that in June 2017 Lebara launched postpaid propositions targeted at the mass market. Telecompaper confirms that ethnic players have more recently started expanding their focus to a more general public⁴⁰⁵. According to the latest market share information, Lebara had 4 000 postpaid subscribers in Q1 2018. As of today, Lebara's position in the postpaid segment remains thus negligible with a [0-5]% subscriber share. Other market players, such as Youfone, have cast doubt on the success of Lebara's postpaid subscription as Lebara will always be seen as ethnic player: *"Youfone believes that Lebara will remain a niche operator despite its recently introduced postpaid offer."*⁴⁰⁶. Simpel confirmed that prepaid MVNOs have difficulties to enter the postpaid segment. With respect to Lebara, Simpel indicates that it does neither have a good distribution model nor the right reputation to successfully enter the postpaid segment⁴⁰⁷.
- (613) Finally, Lebara confirmed that [...] ⁴⁰⁸. [...]. In addition, according to recent news articles, Lebara seems to be having some financial difficulties⁴⁰⁹. The Commission therefore concludes that it is currently uncertain whether Lebara will be successful in competing effectively with MNOs' second brands.
- (614) The Notifying Party frequently refers to competition from several marginal MVNOs, in particular **AH Mobiel and Robin Mobile**. The majority of non-MNO respondents indicated that these do not play a significant role in the

401 See TMNL internal document, [...]

402 See TMNL internal document, [...].

403 See TMNL internal document, [...].

404 See TMNL internal document, [...].

405 See Telecompaper report, Dutch Mobile Virtual Network Operators 2018 Q1 [ID 2293].

406 See Minutes of meeting of 13 July 2018 with Youfone [ID 2347].

407 See Presentation of meeting of 11 July 2018 with Simpel [ID 2375]; see Minutes of meeting with Simpel of 11 July 2018 [ID 2378].

408 See [...].

409 See <https://www.globalcapital.com/article/b176s014lr2zpv/the-lebara-crisis-can-still-kill-the-northern-european-bond-market-dream>. [ID 2513-17]

market and several respondents even indicated that they are unlikely to remain in the market much longer⁴¹⁰. Again, the Parties' internal documents [...]. With regard to Robin Mobile, which has a subscriber market share of [0-5]% in the private postpaid segment, the Notifying Party highlights its unlimited data offer⁴¹¹. However, as also acknowledged by the Notifying Party, Robin Mobile's unlimited offer is subject to a maximum download speed of 1 to 25 Mbps depending on the bundle⁴¹². Given the throttled speed, it does not truly constitute an unlimited offer, and is certainly not an attractive offer for users focussing on high data bundles.

- (615) With regard to **Youfone and Simpel**, non-MNOs' replies were more positive with some respondents arguing that they are able to effectively compete against MNOs' second brands and some respondents arguing that they are also able to effectively compete against MNOs⁴¹³. In addition, respondents stated that Simpel and Youfone have grown rapidly and are still looking to expand.
- (616) While Simpel has been growing rapidly and has achieved a subscriber share of [0-5]% in the retail mobile market) in Q1 2018, Youfone's growth has been more limited remaining at a [0-5]% by subscribers in the retail mobile market. Indeed, Simpel is the fastest growing MVNO in the market. According to Artilium, this is explained by the fact that Simpel has a stronger brand recognition and is more aggressive than Youfone. More generally, Artilium explains that both Simpel and Youfone are attractive for price sensitive customers that are not interested in large data bundles⁴¹⁴. As example of Simpel's aggressive strategy, respondents to the Market Investigation referred to its current promotion to offer tariff propositions at EUR 1 for the first six months⁴¹⁵.
- (617) Responses the Market Investigation are in line with the self-perception of Simpel and Youfone.
- (618) Simpel considers itself to be active at the (low-end) budget segment of the market selling subscriptions mainly at a price below [...] ⁴¹⁶. Simpel explains that it is mainly competing with the MNOs' second brands (Simyo, Ben, Hollandsnieuwe) and independent MVNOs Youfone and Robin Mobile. Simpel indicates to have a "value for money" approach⁴¹⁷. In addition, it attributes its success to high-impact marketing campaigns⁴¹⁸.
- (619) Youfone explains that it is the only important postpaid MVNO besides Simpel⁴¹⁹. According to Youfone, Simpel is a close competitor, however, offering lower prices. Youfone confirms that it is competing mainly with Simpel and MNOs' second brands. Youfone does not see Robin Mobile, Lebara

⁴¹⁰ See responses to RFI 23 to non-MNOs of 2 May 2018, question C.C.4.

⁴¹¹ See Form CO, para 443, 489; Article 6(1)(c) Response, Figure 10.

⁴¹² See <https://www.robinmobile.nl/producten>. [ID 2513-05]

⁴¹³ See responses to RFI 23 to non-MNOs of 2 May 2018, question C.C.4.

⁴¹⁴ See Minutes of call of 18 July 2018 with Artilium [ID 2339].

⁴¹⁵ See responses to RFI 53 to non-MNOs of 11 July 2018, question 14.1; see <https://www.simpel.nl/>. [ID 2513-12]

⁴¹⁶ See Minutes of meeting of 15 May 2018 with Simpel [ID 2377]; Presentation of meeting of 15 May 2018 with Simpel [ID 2372].

⁴¹⁷ See Simpel's response to RFI 23 of 2 May 2018, question C.B.6.2 [ID 2374].

⁴¹⁸ See Minutes of meeting of 15 May 2018 with Simpel [ID 2377].

⁴¹⁹ See Minutes of meeting of 13 July 2018 with Youfone [ID 2347].

or Tibbaa as competitive constraint. Youfone believes that Simpel and Youfone have contributed to decreasing retail prices, but only in certain segments of the market. In addition, Youfone is the first MVNO that launched an FMC product⁴²⁰.

- (620) The Parties' internal documents confirm that Youfone and Simpel compete to a certain extent with MNO's second brands in the low end of the market. [...] ⁴²¹.
- (621) When Youfone started promoting an unlimited offer with a fair use policy of 15 GB in summer 2017, [...] ⁴²². Following this intervention, Youfone was forced to stop advertising its mobile data offer as "unlimited".
- (622) More generally, the Parties' typical competitor benchmarks do not take into account MVNOs. This is the case for [...] ⁴²³. [...] ⁴²⁴. [...] ⁴²⁵.

C. *Limited ability of MVNOs to compete in the present market conditions due to their reliance on the wholesale conditions*

- (623) A factor that strongly affects MVNOs' ability to exert the same competitive pressure as MNOs in the market for retail mobile telecommunication services in a significant and sustained way is their dependency on the wholesale access conditions granted by their respective host MNOs. The wholesale access conditions limit the range of services that they can offer, the customer segment they can address, and the prices they can offer.
- (624) During the Market Investigation most non-MNOs pointed out this challenge and took the view that MVNOs are currently unable to compete effectively in the Dutch market for retail mobile telecommunication services due to the fact that MVNOs enjoy limited bargaining power in negotiations with MNOs and the poor terms of the resulting wholesale access conditions:
- When asked whether it is able to compete in the private segment, the MVNO Lebara stated: "[...]" ⁴²⁶
 - M7 Group, a potential entrant from the fixed segment, explained why it did not become active as MVNO in the private segment: "*We have assessed and had access to MVNO contracts, however the wholesale pricing offered is not commercially viable.*" ⁴²⁷
 - Artilium, MVNE and MVNO, confirmed that wholesale contracts are designed to keep MVNOs in certain segments: "*MVNO's are important in the budget part of the market as they tend to focus there (which is driven by the wholesale conditions). They serve segments that are more cost conscious.*" ⁴²⁸
 - Youfone was also of the opinion that "*its wholesale tariffs are designed to contain Youfone in a certain segment.*" ⁴²⁹

⁴²⁰ See <https://www.youfone.nl/combideals>. [ID 2513-04]

⁴²¹ See Tele2 NL internal documents, [...].

⁴²² See TMNL internal document, [...].

⁴²³ See for example: TMNL internal documents, [...]

⁴²⁴ See for example, Tele2 NL internal documents, [...].

⁴²⁵ See for example: Tele2 NL internal documents, [...] [Filename: T2_00180578.pdf] and Tele2 NL internal documents, [...].

⁴²⁶ See reply of [...].

⁴²⁷ See reply of M7 Group to RFI 23 to non-MNOs of 2 May 2018, question C.C.2.1 [ID 520].

⁴²⁸ See Artilium's response to RFI 23 to non-MNOs of 2 May 2018, question C.C.1 [ID 373].

⁴²⁹ See Minutes of meeting of 13 July 2018 with Youfone [ID 2347].

- Simpel summarised that it is facing the following constraints which are all linked to this wholesale agreement: "*First, the biggest hurdle for MVNOs to be on par with MNOs is the wholesale rates that MVNOs need to pay to MNOs in order to have access to their network. Second, Simpel submits that another constraint for MVNOs is the access to latest technologies. Third, [...]*."⁴³⁰
- (625) The ACM agrees that while MVNOs are able to exert a degree of pressure on the MNOs, this constraint is limited due to the MVNOs' dependence on the MNOs for market access via the wholesale market. On this wholesale market, the MVNOs are largely dependent on the terms granted by the respective MNOs⁴³¹.
- (626) The Market Investigation also revealed that the challenge of the wholesale conditions that the MVNOs face is twofold. First of all, MVNOs are dependent on the wholesale price charged by the host MNO when designing their own tariff plans. In particular, as shown in recitals 627 to 650 below, the Market Investigation provided strong indications that in a data-centric retail market, the non-MNOs already face, and will continue to face, significant difficulties to compete with the MNOs on larger data packages. Second, evidence presented in recitals 651 to 658 below shows that the MVNOs are reliant on the quality of their host network to provide services and therefore are not able to differentiate their retail services from those of the host MNO as regards quality or technical innovation.
- (i) Wholesale access terms limits MVNOs' ability to compete on price
- (627) As explained in Section 6.6.1, in the Dutch market for retail mobile telecommunication services to private customers, price still remains the most important competitive parameter.
- (628) With regard to retail pricing, respondents to the Market Investigation pointed out that, while the majority of non-MNOs are in principle free to design their own tariff plans, they are constrained by the wholesale pricing they receive from their host MNO⁴³². The respondents are concerned that wholesale pricing is not competitive enough compared to retail pricing. As the following statements show, this applies generally in relation to national and international voice calls, SMS, data, as well as to international roaming, and in particular with regard to large data bundles.
- (629) Some respondents indicated not to be able to compete on price with regard to voice calls, SMS and small data bundles:
- With regard to MNOs' unlimited voice and SMS offers, Artidium explained: "*Voice and SMS are increasingly being offered as free/unlimited with data. Wholesale pricing does not allow to bring competitive unlimited offering without significant cost issues (also because of roaming in EU)*."⁴³³

⁴³⁰ See Minutes of call with Simpel of 28 June 2018 [ID 2013]; see Minutes of meeting of 13 July 2018 with Youfone [ID 2347].

⁴³¹ See ACM, "Advies Multibandveiling 2019", 10 October 2017, Form CO Annex 5(14)(4)(2), paragraph 113; see ACM Position Paper [ID 2427].

⁴³² See reply to RFI 23 to non-MNOs of 2 May 2018, question C.C.3; See reply to RFI 53 to non-MNOs of 11 July 2018, question 20, 21, 27.2.

⁴³³ See Artidium's response to RFI 53 to non-MNOs of 11 July 2018, question 20.1.1 [ID 1199].

- With regard to the EU roaming wholesale caps, Youfone stated: *"The EU roaming wholesale caps on Voice and SMS are insufficient for Youfone to compete, the MNO does not want to lower these prices."*⁴³⁴. In addition, Youfone explained that it has a relatively high minimum guarantee it has to pay per SIM card so that small data allowances of 50-500 MB are not cost effective⁴³⁵
 - Several prepaid MVNOs, such as HEMA, consider that their data offerings, even with regard to small data bundles, are not attractive for end customers: *"We offer a pre paid service where the customer uses its credit to pay for data expense[n]diture. This is relatively expensive for a customer."*⁴³⁶
- (630) Furthermore, while at least some MVNOs may be able to compete on voice calls, SMS and small data bundles, it appears that the difficulties that the MVNOs face in relation to designing competitive tariffs are most prominent when it comes to medium-sized to large data plans.
- Voiceworks explained: *"We position 1 to 2 GB data bundles as medium data allowance. Our competitive market position data bundles are handicapped by the purchase limitations we had to agree on with our current MNO supplier."*⁴³⁷. Accordingly, Voiceworks also stated to have difficulties to compete with regard to large data allowances as of 3GB.
 - Expat Mobile indicated that wholesale data tariffs do not adequately follow the retail price evolution: *"We have had several MVNO agreements with Telfort/KPN and Vodafone during the last 12 years. It has always been the same story: while data usage has been increasing, the pricing for data changed only marginally. As a result of this, instead of extending our contract, we have had to switch to another MNO to be able to keep up with the market once the initial term of our contract ended."*⁴³⁸
 - Youfone defined large data bundles from 10 GB to unlimited and stated: *"Youfone is active in this segment (limited) but with high losses"*⁴³⁹
 - [...] ⁴⁴⁰
- (631) With regard to unlimited data offerings, the non-MNOs responding to the Market Investigation explained that they were not able to conclude corresponding wholesale offers which would allow MVNOs to offer unlimited data:
- Artiliium indicated: *"No decent wholesale offer allows for this compared to the operators retail offering, so we have no offering here"*⁴⁴¹
 - Private Mobility: *"we can no[t] compete because of airtime model up to unlimited real usage it makes business case negative and risky"*⁴⁴²

⁴³⁴ See Youfone's response to RFI 53 to non-MNOs of 11 July 2018, question 20.1.1 [ID 1295].

⁴³⁵ See Youfone's response to RFI 53 to non-MNOs of 11 July 2018, question 20.2.1 [ID 1295].

⁴³⁶ See HEMA's response to RFI 53 to non-MNOs of 11 July 2018, question 20.1.1 [ID 1634].

⁴³⁷ See Voiceworks' response to RFI 53 to non-MNOs of 11 July 2018, question 20 [ID 1307].

⁴³⁸ See Expat Mobile's response to RFI 53 to non-MNOs of 11 July 2018, question 20.3.1 [ID 1682].

⁴³⁹ See Youfone's response to RFI 53 to non-MNOs of 11 July 2018, question 20.4.1. [ID 1295].

⁴⁴⁰ See [...].

⁴⁴¹ See Artiliium's response to RFI 53 to non-MNOs of 11 July 2018, question 20.5.1. [ID 1199].

⁴⁴² See reply of Private Mobility to RFI 53 to non-MNOs of 11 July 2018, question 20.5.1 [1257].

- Voiceworks: *"We are not able to offer unlimited data bundles as our MNO supplier is not able nor willing to offer us the required wholesale service nor the required costprice."*⁴⁴³
 - Youfone: *"Unlimited data used in EU is impossible and will be a business killer"*⁴⁴⁴.
- (632) When asked in which segments MVNOs are able to offer more competitive mobile tariffs than their host MNO, the given examples did not concern the mass market. For instance, Lebara indicated that [...] ⁴⁴⁵.
- (633) Telecompaper stresses MVNOs' difficulty of obtaining good wholesale deals in the Dutch market, especially with regard to data bundles: *"Difficult wholesale deals in unregulated market: Independent players continue to struggle to obtain good wholesale deals for data, making it harder for MVNOs to offer large data bundles or even unlimited, as is becoming more common among the MNOS and their second brands. MNOs want to maintain the competitive edge for their own brands with the fastest data speeds and biggest data bundles, as well as earn back their network investments by charging VO [virtual operators] more for data or 4G access."*⁴⁴⁶.
- (634) The MVNOs' inability to offer attractive data packages significantly reduces their competitive strength given the steadily increasing demand for data, which leads tariff plans to become increasingly data centric. Market players expect that the market for large data bundles and unlimited data propositions will continue to grow and to put pressure on the budget market⁴⁴⁷. The growing data consumption in the Dutch market is also further discussed in recitals 29 – 33. In the future, it will become even more critical for MVNOs to be able to compete on large data bundles to gain customers and exert some competitive pressure in the market. Therefore, competitive position of MVNOs may further decrease.
- (635) The MVNO's inability to compete on large data propositions is linked to the common access model in the Netherlands. Wholesale tariffs are mostly based on "Pay-per-Use" model, under which the prices to be paid by the MVNO are based on the number of units of services obtained (that is to say per minute, SMS or MB)⁴⁴⁸. This cost structure imposed by the host MNO (whereby costs increase with traffic, while MNOs' costs are mostly fixed) makes it difficult for MVNOs to compete against MNOs on price, especially as the retail price per GB generally declines with increasing bundle size.
- (636) Wholesale contracts can even be designed in a way to discourage MVNOs from competing aggressively with regard to medium-sized to large data bundles. For instance, Simpel's wholesale contract with TMNL contains [...] ⁴⁴⁹.

⁴⁴³ See reply of Voiceworks to RFI 53 to non-MNOs of 11 July 2018, question 27.1. [ID 1307].

⁴⁴⁴ See reply of Youfone to RFI 53 to non-MNOs of 11 July 2018, question 20.5.1. [ID 1295].

⁴⁴⁵ See [...].

⁴⁴⁶ See Telecompaper, Dutch VO Market 2018 Q1, slide 56 [ID 2293].

⁴⁴⁷ See Simpel's response to RFI 53 to non-MNOs of 11 July 2018, question 20.6 [ID 2373]; see Youfone's response to RFI 23 to non-MNOs of 2 May 2018, question C.C.2.1 [ID 502].

⁴⁴⁸ See responses to RFI 53 to non-MNOs of 11 July 2018, question 26.

⁴⁴⁹ [...]

Table 9 – Example of TMNL's data tariffs in wholesale agreement with Simpel

[...]

Source: See Annex 8B(1) to Form CO, [...].

- (637) By way of example: [...].
- (638) Artilium assumes that wholesale data tariffs for low usage are designed to be unprofitable to keep MVNOs out of Internet Of Things ("IOT") applications, for instance machine-to-machine services. These applications require very limited data, less than 0.5 GB, and host MNOs try to protect this segment⁴⁵⁰.
- (639) Another characteristic of wholesale contracts are price review clauses. The majority of non-MNOs responding to the Market Investigation indicated that their wholesale agreements contain such a clause⁴⁵¹. In principle, price review clauses can be seen as means of protection for both MNOs and MVNOs as they ensure that the wholesale tariffs remain in line with market developments throughout the contract term⁴⁵². However, according to the non-MNOs responding to the Market Investigation, the application of the price review mechanism is in many instances not well defined and not applied in a timely manner:
- Artilium: *"Generally based on market developments which are not well defined. No direction on what the price level is compared to retail prices and how this is calculated."*⁴⁵³
 - Expat Mobile: *"In our case, the MNOs have always tried to stall price adjustments (always downward) for as long as possible."*⁴⁵⁴
 - Voiceworks: *"We do aim for a yea[r]ly improvement of our mobile purchase terms and conditions as part of our current agreement with our MNO supplier. In the meantime we adopt and absorb market driven price decreases which hurt our gross margin by default as we are not able to change the purchase costprice agreements just in time"*⁴⁵⁵
- (640) [Description of price negotiations between TMNL and Simpel]⁴⁵⁶: [...].
- (641) [...]⁴⁵⁷. [...]⁴⁵⁸. [...]. In the Response to the Statement of Objections, the Notifying Party submitted that [...]⁴⁵⁹. In addition, TMNL pointed out that it [...]. [...], the Commission notes that it exemplifies the complexities and uncertainties involved in price review mechanisms.
- (642) The Notifying Party points out several examples of MVNOs offering large data bundles, including Lebara offering unlimited tariff at EUR 25, Youfone offering 20GB at EUR 15, Lycamobile offering 25GB at EUR 17.50 and Simpel offering 10GB at EUR 18.50. However, as quoted in recitals 630 to 638

⁴⁵⁰ See Minutes of call of 18 July 2018 with Artilium [ID: 2339].

⁴⁵¹ See responses to RFI 53 to non-MNOs of 11 July 2018, question 23.

⁴⁵² See Annex 8B(1) to Form CO, [...]

⁴⁵³ See Artilium's response to RFI 53 to non-MNOs of 11 July 2018, question 23.1. [ID 1199].

⁴⁵⁴ See Artilium's response to RFI 53 to non-MNOs of 11 July 2018, question 23.3. [ID 1199].

⁴⁵⁵ See Voiceworks's response to RFI 53 to non-MNOs of 11 July 2018, question 23.2. [ID 1307].

⁴⁵⁶ See TMNL internal documents, [...].

⁴⁵⁷ See [...]; see reply of [...].

⁴⁵⁸ See [...].

⁴⁵⁹ See Response to the Statement of Objections, paragraph 983ff,

above, MVNOs indicate that they are generally not profitable on large data bundles. Hence, they cannot focus their tariff and customers portfolio on large data bundles but merely offer them as part of a complete tariff portfolio. Therefore, the Commission considers that the wholesale access tariffs successfully limit the growth of MVNOs into the large data segment.

(643) With regard to Lebara's unlimited offer, [...] ⁴⁶⁰. [...]. The transitory nature of the Lebara's unlimited offer can also be seen from the fact that it is only offered with Lebara's one month contracts. In addition, Lebara states: "[...]"

(644) [...] ⁴⁶¹. [...].

(645) [...].

(646) [...].

(647) [...] ⁴⁶². [...].

(648) [...].

(649) [...] ⁴⁶³. [...]

(650) Taking into account the points above, the Commission considers that the MVNOs' ability to compete on the retail market, in particular as regards large data packages, is severely constrained by the wholesale cost, and often prevents MVNOs from competing for the high-end data users.

(ii) MVNOs have limited ability to compete on product differentiation and innovation

(651) As explained in recital 145, network quality and network coverage are important competitive parameters after price in the Dutch market for retail mobile telecommunication services to private customers. However, in addition to difficulties related to designing attractive retail tariffs, MVNOs have very limited ability to differentiate their retail services from those of the host MNO as regards quality and coverage.

(652) This is because MVNOs obtain access to a host MNO's mobile network through a wholesale access agreement. The MNOs' decisions regarding network investments and roll-out greatly influence the performance of the MVNOs mobile services and affect the user experience, including through providing different levels of network reliability, coverage and speed. Full MVNOs have some scope of differentiation through value-added services. However, the great majority of MVNOs in the Netherlands operate as light MVNOs and are much more limited in this regard ⁴⁶⁴. In fact, light MVNOs do not have any means to differentiate themselves with regard to network quality and coverage.

(653) In addition, MVNOs do not always have access to all technologies and services available in the MNOs' network. The majority of non-MNOs responding to the Market Investigation stated that they do not have access to the latest mobile technologies in a time manner that would enable them to compete against

⁴⁶⁰ See Minutes of call of [...].

⁴⁶¹ See [...].

⁴⁶² [...].

⁴⁶³ See Response to the Statement of Objections, paragraph 971-982.

⁴⁶⁴ Several MVNEs do have their own core network, however, generally they do not offer services directly to consumers on the retail market.

MNOs⁴⁶⁵. Notably, respondents indicate a delay of 6 months up to 3 years until they were able to offer 4G services:

- Private Mobility: *"New technologies are 4G or 5G or LTE-M for IoT. are usually provided to MVNO three years later than their own market launch"*⁴⁶⁶
- Voiceworks: *"4G/LTE roaming and SIPX interconnects, required for offering HD Voice, has been offered in a very late stage. Even while both needs have been committed and commercially agreed on in a much earlier stage"*⁴⁶⁷
- Expat Mobile: *"We have had several MVNO agreements with Telfort/KPN and Vodafone during the last 12 years. It has always been the same story: when 3G and 4G were introduced to the consumer market, we had to wait 6-12 months before the technology became available for us as an MVNO on the same network"*⁴⁶⁸
- Simpel: *"In the past, Simpel was able to offer the 4G technology only after TMNL's own second brand, Ben, had already launched 4G. [...]. Simpel submits that there is a lack of an equal playing field as regards technology adoption."*⁴⁶⁹ In more detail, Simpel explained that Ben was able to commercially launch 4G in October 2014 whereas Simpel obtained access to 4G end of 2015 (and was only able to launch it at the beginning of February 2016).⁴⁷⁰

(654) While many, but not all Dutch MVNOs are able to offer 4G services by now, MVNOs are likely to be disadvantaged with respect to the upcoming new technologies (such as 5G) that will again be launched by MNOs for their own subscribers only and will only be offered with a significant delay to hosted MVNOs.

(655) [...] ⁴⁷¹. [Based on evidence in its case file, the Commission considers that DTAG has been reluctant in the past to offer 4G services to MVNOs] ⁴⁷².

(656) The Notifying Party's Response to the Statement of Objections confirms that [...]: *"[T]he SO does not take sufficient account of the MNOs' legitimate interest not to undervalue their investments. From the SO, it transpires that the Commission agrees with the MVNOs' complaints regarding delayed access to technologies like 4G. However, the Notifying Party submits that MVNOs' claims should be put into perspective by pointing out that the costs of investments are with the MNOs and not the MVNOs."*⁴⁷³. While the Commission has no objections with regard to investment valuation strategy put forward, it follows that MNOs and MVNOs compete under different competitive preconditions and hence for different customer groups and segments. For instance, MVNOs will not be able to serve customers that are interested in using the latest technologies and speed standards.

⁴⁶⁵ See responses to RFI 53 to non-MNOs of 11 July 2018, question 22.

⁴⁶⁶ See Private Mobility to RFI 53 to non-MNOs of 11 July 2018, question 22.1. [1257].

⁴⁶⁷ See reply of Voiceworks to RFI 53 to non-MNOs of 11 July 2018, question 22.1. [ID 1307].

⁴⁶⁸ See reply of Expat Mobile to RFI 53 to non-MNOs of 11 July 2018, question 22.1. [ID 1682].

⁴⁶⁹ See Minutes of call with Simpel of 28 June 2018 [ID 2013].

⁴⁷⁰ See reply of Simpel to RFI 53 to non-MNOs of 11 July 2018, question 22.1, 22.3. [ID 2373].

⁴⁷¹ See TMNL internal document, [...].

⁴⁷² See TMNL internal document, [...].

⁴⁷³ See Response to the Statement of Objections. paragraph 1007.

- (657) MVNOs' limited ability to differentiate themselves can also be seen in terms of lack of product innovation. MVNOs follow MNOs' innovative product propositions rather than introducing them themselves. For instance, the MVNO Lebara introduced its unlimited tariff, as described in recitals 642 - 643, almost 1.5 years after TMNL introduced the first competitive unlimited tariff in the Dutch market. As pointed out by the Notifying Party in the Response to the Statement of Objections, MVNO Youfone has recently started offering FMC propositions and discounts⁴⁷⁴. However, it only started doing so several years after KPN had started to offer bundled subscriptions and FMC discounts and VodafoneZiggo had followed.
- (658) Finally, if an MVNO could buy wholesale access from more than one MNO, and thus rely on so called multi-sourcing, it would have the possibility to improve its service offer from its host MNO. However, the results of the Market Investigation show that multi-sourcing is not used by Dutch MVNOs as they are generally subject to an exclusivity obligation with respect to their host MNO⁴⁷⁵.

8.3.5.3. Conclusion

- (659) As described in the previous recitals, MVNOs' ability to compete in the Dutch market for retail mobile telecommunication services to private customers is very limited in several aspects. The Commission considers that the ability of MVNOs to compete with MNOs crucially depends on the access conditions that they obtain at the wholesale level, conditions that are controlled by the MNOs themselves. Furthermore, MVNOs have limited bargaining power to negotiate better wholesale access conditions. Finally, most MVNOs are small niche players, with a small presence on the market and little ability to differentiate themselves from MNOs.
- (660) The Commission considers that all the aforementioned factors currently limiting MVNOs' competitiveness would remain after the Transaction. Therefore, post-Transaction MVNOs would remain unable to compete effectively against MNOs. Furthermore, the expected increase of mobile data usage is likely to further limit MVNOs' competitiveness after the Transaction.

8.3.6. *Closeness of competition between TMNL and Tele2 NL*

8.3.6.1. Notifying Party's views

- (661) The Notifying Party argues that it is clear from the Statement of Objections that the legal test is whether a substantial number of customers view the products offered by the Parties as their first and second choice.
- (662) The Notifying Party submits that TMNL and Tele2 NL are not each other's closest competitors.
- (663) First, the Notifying Party submits that the Commission fails to establish a link between the business strategies of the Parties and the extent to which the products of the Parties are regarded as close substitutes by private customers. Further, the Notifying Party submits that, in any case, there are material differences between the Parties' business strategies. Firstly, it submits that its recent strategy has been focused on competing with the FMC offers of KPN

⁴⁷⁴ See Response to the Statement of Objections, paragraph 1006.

⁴⁷⁵ See responses to RFI 53 to non-MNOs of 11 July 2018, question 27.5.

and VodafoneZiggo rather than Tele2 NL. Secondly it submits that, similarly to KPN and VodafoneZiggo, TMNL competes with a dual brand strategy where [...]. On the other hand, Tele2 NL does not have a second brand, rather it competes [...].

- (664) Second, the Notifying Party submits that the Parties do not have a similar customer focus. While [...].
- (665) Third the Notifying Party argues that its unlimited offers were not specifically targeted at "young and heavy data customers" and were not offered as a reaction to Tele2 NL introducing tariffs with larger data bundles but [...]. The Notifying Party also argues that the fact that Tele2 NL started to offer unlimited data packages soon after TMNL started to do so, is not evidence of the two players being close competitors. More specifically, the Notifying Party argues that: [...].
- (666) Fourth, the Notifying Party submits that neither the Parties' positioning with respect to price nor with respect to network quality suggest that Tele2 NL is a close competitor of TMNL. With respect to price, the Notifying Party argues in particular that the Commission's evidence cannot be relied upon given that it does not consistently take into account FMC mobile discounts, MNOs' second brands tariffs and MVNOs' tariffs. With respect to network quality, the Notifying Party submits that TMNL competes with KPN and VodafoneZiggo to [...] whereas Tele2 NL does not try to compete on network quality or download speed given the alleged shortcomings of its network.
- (667) Fifth, with respect to the evidence found in internal documents, the Notifying Party argues that the Commission only relies on one example of Tele2 NL responding to TMNL and presents evidence that Tele2 NL and TMNL also monitor the impact of and react to other market players. The Notifying Party also provides additional context for certain documents which are referred to in the Statement of Objections and, on this basis, contests the Commission's interpretation of these documents.
- (668) Sixth, the Notifying Party argues that that diversion ratios based on a discrete choice customer survey run by the Parties show that:[...] both Parties face a significant constraint from MVNOs. The Notifying Party submits that diversion ratios based on its discrete choice customer survey are more reliable than diversion ratios calculated on the basis of mobile number portability ("MNP") data as used by the Commission in the past.

8.3.6.2. Commission's assessment

- (669) The Commission assessed whether TMNL and Tele2 NL are close competitors. The assessment of the qualitative and quantitative evidence is presented in the following recitals.

A. *Qualitative evidence on closeness of competition*

- (670) Based on its assessment of: (i) the Parties' business strategy; and (ii) their positioning with respect to the most important parameters of competition; the Commission concludes that the Parties can today be considered as close competitors.
- (i) The Parties' business strategy
- (671) The evidence in the Commission file shows similarities between the Parties' current business strategies in the provision of retail mobile telecommunications

services to private customers in the Netherlands. First, TMNL and Tele2 NL both offer mobile services to private customers as a standalone service and have been adopting aggressive strategies to increase the size of their private customer base. KPN and VodafoneZiggo, on the other hand, have a strong focus on offering mobile services as part of FMC bundles and increasing the ARPU to achieve growth rather than expanding their customer base. Second, the Commission also observes material overlaps in the specific customer groups that have recently been targeted by TMNL and Tele2 NL.

(a) *TMNL and Tele2 NL both currently focus on a mobile-only strategy*

(672) Based on the Market Investigation⁴⁷⁶ and submissions made by the Notifying Party, the Commission observes two main strategic orientations in the Dutch market: a mobile-led strategy followed by Tele2 NL [...] and also mainly by TMNL, and an FMC-focused strategy adopted by KPN and VodafoneZiggo. In its the Response to the Statement of Objections, the Notifying Party argues that [...]. While the Commission acknowledges that TMNL has undertaken concrete steps to move towards FMC, it considers that, similar to Tele2 NL, TMNL's strategy is currently still predominantly mobile-only.

TMNL

(673) TMNL has focused on mobile-only offerings since 2013, when it divested its fixed business. [...] ⁴⁷⁷.

(674) While TMNL has recently undertaken concrete steps in order to launch FMC offers, TMNL's strategic focus remains mainly on mobile-only offers. As noted above, in 2016, TMNL acquired Vodafone's fixed consumer business; the Notifying Party submits that, following this acquisition, [...]. This plan [...].

(675) [Discussion on recent commercial initiatives launched by TMNL including its FMC offer and unlimited mobile-only tariffs] ⁴⁷⁸⁴⁷⁹.

(676) The Commission therefore rejects the Notifying Party's argument that TMNL's strategy has focused on competing with the FMC offers of KPN and VodafoneZiggo rather than Tele2 NL. Instead, the Commission finds that TMNL currently mostly competes through its mobile-only offers both with Tele2 NL, KPN and VodafoneZiggo's mobile-only offers and also with KPN and VodafoneZiggo's FMC offers.

⁴⁷⁶ In particular, when asked to identify the closest competitor for each of TMNL and Tele2 NL, respondents to the Market Investigation indicated that the Parties are close competitors. Notably, when asked which of the other MNO's and MVNO's brands were T-Mobile's closest competitors for private customers, Tele2 NL was identified 10 times as T-Mobile's closest competitor, followed by KPN and Simpel, each identified 7 times. With regard to TMNL's second brand Ben, respondents identified Simpel (12 times) and HollandsNieuwe (10 times) before Telfort and Tele2 NL indicating that respondents consider Tele2 NL to compete more closely to T-Mobile than Ben. When asked which of the other MNO's and MVNO's brands were Tele2 NL's closest competitors for private customers, T-Mobile was identified most often (11 times), followed by Telfort (9 times) and Hollandsnieuwe (9 times). TMNL's second brand Ben was mentioned less than T-Mobile and these other players (8 times). See responses to RFI 23 to non-MNOs of 2 May 2018, questions C.D.1 and C.D.3 and RFIs 26 and 27 to KPN and Vodafone of 2 May 2018, questions 31 and 31 [ID 1175, 2235].

⁴⁷⁷ See for example Tele2 NL internal documents, [...].

⁴⁷⁸ See Form CO paragraph 762.

⁴⁷⁹ See Form CO paragraphs 762 and 763.

Tele2 NL

- (677) Despite owning fixed assets and offering mobile in a bundle with fixed products to business customers, the evidence in the Commission's file shows that Tele2 NL's private customer strategy is mobile-only; Tele2 NL does not offer FMC bundles to private customers in the Netherlands.
- (678) Tele2 NL's intention to continue with a mobile-led strategy is apparent in its internal documents⁴⁸⁰ and confirmed by Tele2 NL in the Response to the Statement of Objections.

Other MNOs

- (679) By contrast, while KPN and VodafoneZiggo do offer mobile-only tariffs, their focus is clearly on FMC bundle offers. Indeed, KPN was the first operator to embark on an FMC strategy in the Netherlands in 2013 and today it is the leading operator for FMC offers. In February 2016, the merger of Vodafone and Ziggo created a second fixed-mobile player with national coverage. Vodafone's CEO described this transaction as marking "*a continuation of Vodafone's market-by-market convergence strategy*"⁴⁸¹. [...] ⁴⁸².
- (680) In summary, the Commission observes that, although TMNL has undertaken concrete steps in order to compete against KPN and VodafoneZiggo's FMC offers, TMNL and Tele2 NL currently mainly pursue a similar strategy of focussing on selling mobile as a standalone product rather than a bundled product as KPN and VodafoneZiggo have opted to do. The similarity in this strategy is not limited to the mode of selling products but has also translated in TMNL and Tele2 NL both competing to grow their private mobile customer base rather than to increase the ARPU per subscriber.
- (b) *Common features in terms of customer focus*
- (681) The Commission observes that TMNL and Tele2 NL share a number of common features in terms of their customer focus, in particular data heavy customers.
- (682) The Commission considers that each of the Parties has sought to win customers through exploring and launching innovative tariffs and services which are particularly attractive to data centric customers, in particular unlimited data packages. TMNL was the first MNO on the Dutch market to offer an unlimited data package under the T-Mobile brand. It did so initially at a price of EUR 85; however in January 2017, TMNL re-launched the offer at the much lower price of EUR 35. In May 2017, Tele2 NL launched an unlimited data package at EUR 25, although this has since been increased to EUR 28. While the other MNOs also offer large data plans, neither of them has responded with an unlimited offer to compete.
- (683) With respect to age groups, Tele2 NL has a clear focus on "[...]" as can be seen from its internal documents⁴⁸³. [Comparison between Tele2 and TMNL in terms of age group focus]⁴⁸⁴.

⁴⁸⁰ For example, see TMNL internal documents, [...].

⁴⁸¹ See <https://www.fiercewireless.com/europe/vodafone-strengthens-dutch-convergence-play-liberty-jv> [ID 2513-22]

⁴⁸² Tele2 NL internal documents, [...].

⁴⁸³ For example see Tele2 NL internal document "[...]"

- (684) Furthermore, recent data indicates that TMNL and Tele2 NL are both gaining share among the same customer groups, in particular young people⁴⁸⁵. Recent data from Telecompaper shows that younger customers make up the bulk of Tele2 NL's customer base and, this is precisely the target group in which TMNL is currently gaining traction. While Tele2 NL and TMNL are the two MNOs with the highest proportion of customers aged 12-29, there is still a significant gap between Tele2 NL (highest proportion) and TMNL (second highest)⁴⁸⁶.
- (685) The Market Investigation further supports the finding that there are overlaps between the Parties' key target groups. With regard to TMNL, young people (in particular aged 20 – 29), families and price sensitive customers were identified most frequently as its target customer groups. The explanation given to why it was attractive to families was because TMNL offers large data bundles. With regard to Tele2 NL, young customers (both aged 12 – 19 and 20 – 29) and price sensitive customers were identified most frequently as its target customer groups. Premium customers and older customers were not considered as the target customer group by any respondents for Tele2 NL (except for one single respondent which identified "premium customers" as a target customer group for Tele2 NL) and only by a limited number of respondents for TMNL⁴⁸⁷.
- (686) In a number of the Parties' internal documents, the Parties (in particular Tele2 NL) indicate that they consider each other to be competing for the same customers, in particular when Tele2 NL first launched as an MNO.
- (687) [Evidence of closeness between Tele2 NL and TMNL found in the Parties' internal documents]⁴⁸⁸.
- (688) [Evidence of closeness between Tele2 NL and TMNL found in the Parties' internal documents]⁴⁸⁹⁴⁹⁰.
- (689) [Evidence of closeness between Tele2 NL and TMNL found in the Parties' internal documents]⁴⁹¹.
- (690) In summary, the Commission observes that TMNL and Tele2 NL's strategies are characterised by similarities also with regard to their customer focus and that they have been competing for the same customer groups.
- (ii) The Parties' positioning with respect to the most important parameters of competition
- (691) The evidence in the Commission's file shows that the Parties have similar positioning in the retail mobile private market in the Netherlands with respect

⁴⁸⁴ TMNL internal documents, [...].

⁴⁸⁵ Telecompaper – Postpaid MobileInsight – Latest developments in the Dutch postpaid mobile market – 4 May 2018, slides 17 and 18 [ID 842; Postpaid Mobile Insight-2018Q1.pdf], submitted in response to RFI 38 by the Notifying Party.

⁴⁸⁶ Tele2 NL is by far the player with the larger proportion of customers aged 12-29 ([...]). Among the MNOs, TMNL comes second with [...]% of its customer base in this age group while KPN and VodafoneZiggo follow with a proportion of respectively [...]% and [...].

⁴⁸⁷ See responses to RFI 53 to non-MNOs of 11 July 2018 question 19; responses to RFIs 57 and 58 to KPN and VodafoneZiggo, responses to question 14 [ID 2210, 1785].

⁴⁸⁸ Tele2 internal documents, Tele2, [...]

⁴⁸⁹ Tele2 NL internal documents, [...].

⁴⁹⁰ Tele2 NL internal documents, [...].

⁴⁹¹ Tele2 NL internal documents "[...].

to the key parameter of competition that is price. While the fact that Tele2 NL owns its 4G network differentiates it from MVNOs, Tele2 NL lags behind the other MNOs in terms of network quality and it is expected that this gap will keep increasing in the future.

(a) *Pricing*

- (692) As explained above in Section 6.6.1, the Commission considers that price is the most important parameter of competition in the Dutch market for private mobile customers. The Commission finds that TMNL and Tele2 NL compete closely on this parameter.
- (693) Figure 17 shows that for bundles up to 20GB, there are no material differences between the pricing of each of the four MNOs. The ACM notes however in the ACM Position Paper, that for the higher volume bundles, taking into account discounts and additional data allowances when purchasing mobile in a bundle with fixed telecommunications services, most of TMNL's and Tele2 NL's subscriptions are priced lower or provide more GB per month than KPN and VodafoneZiggo's offers.
- (694) Price and tariff comparisons from different sources (analyst reports⁴⁹², price comparator website⁴⁹³ and the Parties' internal documents⁴⁹⁴) suggest that there may be a price gap between the mobile-only tariffs of TMNL and Tele2 NL, on the one hand, and the mobile only offers of KPN and VodafoneZiggo, on the other hand. These analyses often however do not take into account additional benefits included in FMC packages (discounts on the mobile element, additional data, other add-on services) or below the line offers.
- (695) As noted above in recital 148, the ACM⁴⁹⁵ observes that there is a price gap between the mobile offerings of TMNL and Tele2 NL, on the one hand, and KPN and VodafoneZiggo, on the other hand, particularly in regard to large data bundles.
- (696) The Parties' internal documents provide an analysis of how the two players compete on price. [...] ⁴⁹⁶ [...].
- (697) Overall, the Commission observes that there are no material differences in the Parties', KPN and VodafoneZiggo's pricing for the most common mobile packages, however for the larger data bundles, the Parties' prices are closer than the other MNOs and the Parties are the only MNOs offering unlimited data tariffs. However, to the extent this analysis relies on the Parties' unlimited

⁴⁹² See for example Kepler Cheuvreux, KPN, 6 July 2017, page 14 [ID: 1755-66031; Filename: TMNL-EC-229319.pdf]: "In mobile, there is a clear segmentation between premium brands like KPN and VodafoneZiggo and value brands such as T-Mobile and Tele2. The premium segment of the consumer mobile market is seen as rational with both players applying a more-for-more and a FMC strategy which is expected to optimise market value. Mobile competition is mainly at the low end of the market, where KPN competes with its nofrills brand Simyo and Telfort with Tele2 and T-Mobile. Both T-Mobile and Tele2 have engaged on aggressive mobile pricing to gain subscriber share, and both have recently launched unlimited data propositions". See also Exane BNP Paribas, Unlimited Data – Why? How? So What? What Next?, 16 January 2017, pages 8 and 9, Form CO Annex 5(14)(2)(1) [ID: 381-288].

⁴⁹³ See for example Tele2's internal documents, [...]. [ID: 1085-40005; Filename: T2_00219998 msg].

⁴⁹⁴ For example, [...] [ID:1085-78000; Filename: T2_00223728.pdf], [...]; Tele2 internal documents, [...] [ID: 1085-69979; Filename: T2_00248809.pdf], [...]; Tele2 internal documents, [...] [ID: 1085-77997; Filename: T2_00257997.pdf].

⁴⁹⁵ See the ACM Position Paper, reproduced as Figure 17 [ID 2427].

⁴⁹⁶ TMNL internal documents, [...].

data offers, it is subject to Tele2 NL's ability to sustain unlimited data tariffs in the future. In this respect, [...]. As explained in more detail in Section 8.3.2.2.B, the Commission considers that there are uncertainties as to Tele2 NL's ability to continue its unlimited offer going forward.

(b) *Network characteristics*

(698) In the Statement of Objections, the Commission found that the Parties were close competitors in terms of network characteristics. The Notifying Party has presented additional evidence in support of its claim that the Parties are not close in terms of network quality. In light of this evidence, the Commission concludes that, while the fact that Tele2 NL operates its own network is in itself an element of closeness between Tele2 NL and TMNL, among the four MNOs, there is a gap between Tele2 NL and TMNL's network quality.

(699) As a preliminary observation, the Commission notes that Tele2 NL operates its own 4G network and only relies on a 2G and 3G network roaming agreement with TMNL for a small and decreasing portion of its traffic⁴⁹⁷. This differentiates Tele2 NL from MVNOs whose ability to exert competitive pressure in the retail market in a significant and sustainable way is dependent on the wholesale access conditions granted by their respective host MNOs.

(700) However, other MNOs, in particular TMNL, own more spectrum and sites than Tele2 NL (see for instance Table 1) which translates in stronger network performance in particular in terms of 4G indoor coverage. This is for example reflected in the results of the P3 network studies (see recital 424) in which TMNL received the highest score and an "outstanding" grade whereas Tele2 NL received the lowest score among the four MNOs.

(701) As described in recitals 422 - 427, TMNL's network is the best in the Netherlands and network quality is one of TMNL's key competitive strength. By contrast, [...]⁴⁹⁸, Tele2 NL still lags behind TMNL and the other MNOs in terms of network quality [...]⁴⁹⁹) [...]⁵⁰⁰.

(702) Based on the above, the Commission concludes that Tele2 NL's own network allows it to provide mobile services to its customers. While this is an element of closeness with the other three MNOs active on the Dutch market, the Commission also finds that there is a gap in network quality between Tele2 NL and TMNL.

(iii) *Conclusion on qualitative evidence*

(703) In light of the above, the Commission considers that the Parties currently are close competitors. However, as explained in Section 8.3.2.2.B, it is expected that the gap in network performances (capacity and quality) between Tele2 NL and TMNL will further increase in the coming years therefore casting doubts on Tele2 NL's ability to sustain the close competition that it currently exercises on TMNL.

⁴⁹⁷ [...],

⁴⁹⁸ See for example Tele2 NL internal documents [...].

⁴⁹⁹ See Tele AB internal documents, [...][Doc. ID: T2_00255612].

⁵⁰⁰ See Tele2 NL's internal document, [...] [annex 3(22) to Response to the Statement of Objections].

B. *Quantitative evidence on closeness of competition*

- (704) The Commission's analysis of the diversion ratios provides a measure of the degree of the closeness between the Parties.
- (705) The Horizontal Merger Guidelines explain that diversion ratios are one of the methods that can be used to assess the closeness of competition between the merging parties and the other market participants⁵⁰¹. The diversion ratios indicate the extent to which sales lost by one of the parties are taken up by the other party or the remaining market participants. The Commission has applied this type of analysis in previous merger cases in the telecommunications sector⁵⁰².
- (706) In the first phase investigation, the Commission calculated diversion ratios at the network level (that is, including each MVNO under its corresponding MNO host and considering customer switching across networks) based on MNP data collected from the mobile operators. On this basis, it found sizeable diversion between the networks of TMNL and Tele2 NL and vice versa.
- (707) MNP data provides information on actual switching between providers for customers that port their number from their old provider to the new provider. Switching recorded in the MNP data is not limited to price based switching and does not provide direct evidence on consumers' next best alternative at the time of the choice (which may be different from the old provider). Moreover, MNP data only captures switching of consumers that chose to port their number.
- (708) While the Commission considers that MNP data provides a good proxy for consumer switching and, for this reason, has relied on MNP data in past decisions, during the second phase investigation it carried out the Survey to address possible biases in diversion ratios computed on the basis of MNP data.
- (709) The Survey has been conducted by telephone and aims at eliciting switching patterns between each of TMNL, Tele2 NL as well as Simpel and the other mobile operators in response to price changes. A set of 2 500 customers that have recently (between November 2017 and April 2018) switched to TMNL, Tele2 NL and Simpel have been asked about their likely choices if their most recent choice of mobile provider (TMNL, Tele2 NL or Simpel) had been more expensive or not available.
- (710) The Commission has computed two sets of diversion ratios from the responses to the Survey. The first is based on respondents' stated behaviour in the hypothetical event that the tariffs of their most recently chosen provider had been more expensive at the time they made their choice ('intensive question')⁵⁰³. The second set of diversion ratios is based on respondents' stated switching behaviour in the hypothetical event that their most recently chosen

⁵⁰¹ Horizontal Merger Guidelines, paragraph 29.

⁵⁰² Commission decision of 12 December 2012 in case M.6497 – *Hutchison 3G Austria/Orange Austria*, recital 176, Commission decision of 2 July 2014 in case M.7018 – *Telefónica Deutschland/E-Plus*, recitals 273 and following, Commission decision of 11 May 2016 in case M.7612 – *Hutchison 3G UK/Telefónica UK*, recitals 443 and following, Commission decision of 11 May 2016 in case M.7758 – *Hutchison 3G Italy/Wind/JV*, recitals 798 and following.

⁵⁰³ The consumers were asked about their most recent choice of mobile telephone brand and which brand they would have chosen in case the price of the chosen brand had been approximately 10% higher per month at the time they made their choice.

provider had not been available at the time they made their choice ('extensive question').

- (711) Both questions elicit information on the distribution of respondents' second choices at the time they made their choice, that is, on what the respondents considered the next best alternative at the time of their choice. The intensive question has the further benefit that it can identify the second choices of marginal consumers, i.e. of those that are most likely to change their behaviour following a price increase. In contrast, the extensive question provides information on the distribution of second choices of average consumers, including those that would likely not change their behaviour following a 10% price increase. While responses to the intensive question are the most relevant for the assessment of likely behaviour following price increases, the Survey featured significantly fewer responses to that question.
- (712) The computed diversion ratios can be presented at the network level or at the provider level. For the former, switching is considered across the four mobile networks only and each non-MNO is aggregated under its host network. The diversion ratios at the provider level instead assume that each MVNO is fully independent from its host network and, therefore, report them separately.
- (713) More details on the Survey and the calculation of diversion ratios based on this Survey data are presented in Annex A to this Decision. Annex A also discusses the Notifying Party's arguments on diversion ratios in the Article 6(1)(c) Response and the Response to the Statement of Objections.
- (714) The Commission has calculated diversion ratios separately for the private and the postpaid private segments which are the market segments in which the Parties have the strongest position.
- (715) Tables 13 and 14 present the diversion ratios at the network and at the provider level, respectively, based on intensive and extensive Survey questions⁵⁰⁴.

Table 13 - Diversion ratios based on the intensive and extensive Survey question, network level

	TMNL	Tele2 NL	KPN	Vodafone
Overall private				
TMNL	-	[10-20]%	[40-50]%	[40-50]%
Tele2 NL	[40-50]%	-	[30-40]%	[20-30]%
Postpaid private				
TMNL	-	[10-20]%	[40-50]%	[40-50]%
Tele2 NL	[40-50]%	-	[30-40]%	[20-30]%

- (716) At network level, [10-20]% of private customers that chose a TMNL or Smpel tariff indicated Tele2 NL's network as their second choice, while [40-50]% and [40-50]% indicated respectively KPN's and VodafoneZiggo's networks as their

⁵⁰⁴ The choice to rely both on the intensive and extensive survey questions was introduced following the Notifying Party's Response to the Statement of Objections criticizing the insufficient number of respondents to the intensive survey question. For further details, please refer to Annex A.

second choice alternative. Of Tele2 NL's private customers, [40-50]% indicated TMNL's network as their second choice, while [30-40]% and [20-30]% indicated KPN's and VodafoneZiggo's network as their second choice, respectively. For TMNL, very similar diversion ratios are observed in the postpaid segment. For Tele2 NL's postpaid customers, diversions from Tele2 NL to TMNL are slightly higher ([40-50]%), while diversions to KPN and VodafoneZiggo are lower ([30-40]% and [20-30]% respectively).

Table 14 – Diversion ratios based on the intensive and extensive Survey question, provider level

	TMNL	Tele2	Simpel	KPN	Vodafone	Others
Overall private						
TMNL	-	[10-20]%	[5-10]%	[30-40]%	[40-50]%	[0-5]%
Tele2 NL	[30-40]%	-	[5-10]%	[30-40]%	[20-30]%	[0-5]%
Simpel	[20-30]%	[10-20]%	-	[30-40]%	[10-20]%	[10-20]%
Postpaid private						
TMNL	-	[10-20]%	[5-10]%	[30-40]%	[40-50]%	[0-5]%
Tele2 NL	[30-40]%	-	[10-20]%	[20-30]%	[20-30]%	[0-5]%
Simpel	[20-30]%	[10-20]%	-	[30-40]%	[10-20]%	[10-20]%

- (717) The diversion ratios at provider level are generally lower than at network level due to diversions to MVNOs. At provider level, [10-20]% of TMNL's private (and private postpaid) customers indicated Tele2 NL as their second choice. For Tele2 NL, diversions to TMNL are also lower ([30-40]% in private segment and [30-40]% in postpaid segment) with diversions to Simpel (which is hosted by TMNL) amounting to [5-10]% for private and [10-20]% for private postpaid customers.
- (718) Overall, the diversion ratios based on the intensive and extensive Survey questions show that a sizeable amount of customers of each of the Parties have as second best alternative the other Party, as well as the other two MNOs. This shows a significant degree of closeness of competition among the four MNOs in the market. The diversion ratios from TMNL to Tele2 NL range between [10-20]% and [10-20]% in the overall and postpaid private segment, suggesting that Tele2 NL represents some competitive constraint on TMNL. However, diversions from TMNL to Tele2 NL are lower than Tele2 NL's gross add share in the private postpaid segment would suggest. The diversions from Tele2 NL to TMNL are between [30-40] and [40-50]% in the private segment and around [30-40] to [40-50] % in the postpaid private segment, suggesting that TMNL represents a large competitive constraint on Tele2 NL.
- (719) Further diversion ratios and switching patterns are analysed and discussed in Annex A of this Statement of Objections. In particular, a comparison between diversion ratios based on the intensive and extensive Survey question and MNP data shows that diversions between the Parties are higher based on MNP data.

(720) Overall, the Commission concludes that, while diversion ratios based on MNP data are higher, the results of the Commission's Survey do not strongly indicate that both Parties are particularly close (or the closest) competitors to each other, but rather underline that there is a significant degree of closeness of competition among the four MNOs in the market.

8.3.6.3. Conclusions on closeness of competition

(721) The Commission concludes that while the Parties currently are close competitors, the expected increase of the gap in network performances (capacity and quality) between TMNL and Tele2 NL casts doubts on Tele2 NL's ability to maintain the close competition that it currently exerts. The quantitative evidence corroborates the Commission's qualitative finding. The results of the Commission's Survey, that was carried out in the first half of 2018, indicate in particular that the competitive constraint exerted by Tele2 NL on TMNL is limited.

8.3.7. *Complaints regarding the vertical interrelation between the wholesale and the retail mobile market*

(722) The market for retail mobile telecommunication services in the Netherlands and the wholesale market for access and call origination on public mobile telephone networks in the Netherlands are not vertically affected as the Parties' combined market share is below 30% in both markets⁵⁰⁵.

(723) Equally, the wholesale market for access and call origination on public mobile networks in the Netherlands is not horizontally affected as the Parties' combined market share is lower than 20%.

(724) The Commission notes in particular that Tele2 NL has a negligible position in the wholesale market for access and call origination on public mobile networks with a market share of [0-5]% in 2017. The limited market shares of the merged entity in the wholesale and retail markets as well as the negligible increment provide a first indication that foreclosure effects are unlikely.

(725) However, [...], the Commission has nonetheless investigated whether the merged entity would have the ability and incentive to foreclose Simpel by restricting wholesale access or worsening wholesale access terms and conditions (such as rates or access to new technologies) in comparison with the rates and terms they would offer absent the Transaction. The Commission has also assessed whether such foreclosure would have a significant detrimental effect on competition in the retail market. This analysis is in line with paragraph 36 of the Horizontal Merger Guidelines and paragraphs 31 to 57 of the Non-horizontal Merger Guidelines.

8.3.7.1. Complaint from [...]

(726) [...]⁵⁰⁶.

(727) [...]⁵⁰⁷. [...]⁵⁰⁸.

⁵⁰⁵ Please refer to Section 7.4.2 for a summary of vertically affected markets.

⁵⁰⁶ Submission of [...].

⁵⁰⁷ See [...].

⁵⁰⁸ See [...].

8.3.7.2. Notifying Party's views

- (728) The Notifying Party argues that the wholesale access conditions of MVNOs will not change post-Transaction. In particular, the Notifying Party argues that the Transaction does not result in a structural change in the market for wholesale services for access and call origination on mobile networks in the Netherlands and that TMNL's incentive to host MVNOs will not change post-Transaction.
- (729) The Notifying Party also submits that the merged entity will be better placed as a result of the Transaction to offer wholesale access [...] ⁵⁰⁹.

8.3.7.3. Commission's assessment

- (730) The Commission considers that the Transaction will not lead to a significant impediment of effective competition as a result of the merged entity foreclosing MVNOs from access to its mobile network.
- (731) Simpel is the only successful mass market MVNO hosted on TMNL's network. Other MVNOs hosted on TMNL's network have a negligible market presence and do not exert any competitive pressure on the market. Therefore, the Commission focusses its assessment on the likely effects of the Transaction on the competitive constraint to be exerted by Simpel post-Transaction.
- (732) As set out below in Section 8.3.7.3.A and 8.3.7.3.B the Commission concludes that post-Transaction, the merged entity would have the ability and the incentive to engage in a foreclosure strategy vis-à-vis Simpel. In particular, the Commission considers that wholesale price reductions that might have occurred absent the Transaction may not take place, or wholesale access terms may deteriorate. These wholesale price increases will be likely passed through to some extent, thereby deteriorating the competitive pressure that Simpel will be likely to exert at the retail level.
- (733) However, for the reasons set out in Section 8.3.7.3.C, the Commission concludes that that any deterioration of wholesale access terms for Simpel will not have anti-competitive effects on the retail market for mobile telecommunication services and no significant impediment to effective competition can therefore be expected as a result of the Transaction.

A. *Ability to deteriorate Simpel's competitive position*

- (734) The Commission considers that the merged entity would have the ability to foreclose Simpel given: (i) the terms of the wholesale agreement between TMNL and Simpel; (ii) the limited number of alternative wholesale providers; and (iii) barriers to Simpel switching wholesale hosts.
- (i) Wholesale agreement terms
- (735) Wholesale access is an essential input for non-MNOs to provide mobile services. The wholesale market for access and call origination services is not regulated in the Netherlands and thus non-MNOs are dependent upon effective wholesale competition to achieve wholesale terms which allow them to be competitive on the market for retail mobile telecommunication services.

⁵⁰⁹ See Response to the Statement of Objections, paragraph 905.

- (736) [Information on the duration of the wholesale agreement between TMNL and Simpel]⁵¹⁰.
- (737) As regards the terms and conditions of the wholesale agreement, as discussed in recital 639 above, MVNOs rely on regular price reviews in order to stay competitive on the retail market. [Information on price negotiation between TMNL and Simpel].
- (738) The Commission notes that MVNOs' retail margins are extremely narrow, especially in relation to data, and therefore any increase, or absence of decrease under the price review mechanism, can have a very significant impact on the ability of MVNOs to compete. The Commission also notes that access costs represent a significant proportion of the MVNOs' costs and are the largest cost per user for a non-MNO is the wholesale access cost.
- (739) [...] ⁵¹¹. [...].
- (740) Therefore, a possible foreclosure strategy implemented by TMNL could negatively impact Simpel's ability to compete with the MNOs on the downstream retail market. Hence, it cannot be excluded that Simpel's competitive constraint, which was already limited by the existing wholesale access conditions pre-Transaction, may further deteriorate post-Transaction.
- (ii) Concentrated wholesale market
- (741) While pre-Transaction the Dutch wholesale market is already very concentrated, the structure of the wholesale market will not be altered by the Transaction. There are four MNOs on the Dutch market capable of offering wholesale access to MVNOs. TMNL is the second largest player on the Dutch wholesale market with a share of [10-20]%. The other three are discussed below.
- (a) *KPN*
- (742) KPN dominates the market with a share of close to [80-90]% both in terms of subscribers and revenues in 2017⁵¹².
- (743) While KPN may be the largest player on the market, Simpel submits that competition on the mobile wholesale access market is limited in part because MNOs, have second brands which compete directly with MVNOs⁵¹³.
- (744) As explained below in recital 764, an MNO faces a dilemma between: (i) hosting an MVNO which may compete with (cannibalise) its own customer base; and (ii) earning the revenues from the wholesale agreement. Given that mass market MVNOs such as Simpel and Youfone compete directly with KPN's second brand Telfort, KPN has a limited incentive to offer them attractive and competitive wholesale access rates as this would increase the degree of cannibalisation.
- (b) *VodafoneZiggo*
- (745) VodafoneZiggo has a market share of [0-5]% by revenues and [0-5]% by subscribers in 2017. Before the implementation of the Dutch joint venture

⁵¹⁰ See Annex 8(B)1 to Form CO, [...].

⁵¹¹ See [...].

⁵¹² See Article 6(1)(c) Response, paragraph 473; see Annex 7(1) to Form CO.

⁵¹³ See reply of Simpel to RFI23 of 2 May 2018, question D.8 [ID 2374].

between Liberty Global and Vodafone, Vodafone used to host the MVNO Ziggo on its network. Even taking Ziggo into account, Vodafone was a much smaller player than KPN and TMNL ([5-10]% by revenues and [10-20]% by subscribers).

- (746) VodafoneZiggo's less active role in the wholesale market in the Netherlands is consistent with Vodafone's strategy in other countries, as explained in Commission decisions in *Hutchison 3G UK/Telefonica UK* and *Hutchison 3G Italy/Wind/JV*⁵¹⁴. This is also confirmed by several market players and evidence on file, and the fact that 4G services are currently outside the scope of its current MVNO agreements⁵¹⁵.
- (747) The Notifying Party acknowledges that Vodafone has not been an active player in the wholesale market, but argues that the combined entity VodafoneZiggo might become more aggressive in the future. The Commission considers that the Notifying Party's claim⁵¹⁶ is speculative; no evidence on the file suggests that following the formation of the joint venture in January 2017 there has been a change in VodafoneZiggo's wholesale strategy. Indeed, VodafoneZiggo has not increased its market share in the wholesale market in 2017 or 2018.

(c) *Tele2 NL*

- (748) Tele2 NL has [...] active contract with a non-MNO and a market share of [0-5]% and the Notifying Party submits that Tele2 NL is not active on the wholesale market for access and call origination.
- (749) [Additional evidence of Tele2 NL not being an active player on the wholesale market]⁵¹⁷.
- (750) This is confirmed by non-MNOs responding to the Market Investigation which confirm that Tele2 NL has not been willing or able to conclude wholesale access agreements in the past⁵¹⁸.
- (751) Accordingly, the Commission does not consider that Tele2 NL is an active player on the wholesale market.

(d) *Summary*

- (752) Given the concentrated nature of the wholesale market in the Netherlands, there is insufficient competition among host MNOs, and KPN and TMNL have a significant degree of market power. As a result, MVNOs' bargaining position vis-à-vis MNOs in the Dutch market is particularly weak and TMNL may have the ability to adopt a foreclosure strategy in the upstream wholesale market.

(iii) *High switching costs*

- (753) The ability of non-MNOs to switch host is not altered by the Transaction. However, already pre-Transaction, while switching is possible, there are significant barriers to switching host MNO. Therefore, it is unlikely that

⁵¹⁴ See Commission decision of 11 May 2016 in case M.7612 - *Hutchison 3G UK/Telefonica UK*, paragraphs 2226-2263; Commission decision of 1 September 2016 in case M.7758 - *Hutchinson 3G Italy/WIND/JV*, paragraphs 1325-1330.

⁵¹⁵ See reply to RFI 58 of VodafoneZiggo, question 18 [ID: 1785].

⁵¹⁶ See Response to the Statement of Objections, paragraph 961ff.

⁵¹⁷ See submission of Tele2 NL dated 4 June 2018.

⁵¹⁸ See replies to RFI 23 to non-MNOs of 2 May 2018, questions C.G.2.2 and C.G.2.3.

Simpel would be able to profitably switch as a response to any attempt by the merged entity to worsen terms of access.

- (754) In particular, non-MNOs incur substantial costs of a commercial, contractual and technical nature in order to change hosts. Light MVNOs, such as Simpel, would have to perform a SIM swap (i.e. each customer would need to receive and start using a new SIM card) to successfully migrate the customer base⁵¹⁹. This often stops non-MNOs swapping MNO providers, due to the costs and risks that entails.
- (755) Simpel submits that changing the SIM cards of each of its users as a very complicated and costly process that involves a high risk of losing customers⁵²⁰.
- (756) This is confirmed by other MVNOs. Lebara confirms [...] ⁵²¹. [...] ⁵²².
- (757) Postpaid MVNOs estimate that a SIM swap would entail a customer loss of about 10%⁵²³. In contrast, the Notifying Party submits [...] ⁵²⁴. However, the accompanying submitted evidence suggests that [...].
- (758) On a forward looking basis, the Notifying Party submits that switching costs will decrease in time due to the introduction of e-SIMs that enable remote SIM provisioning of any mobile device, hence removing the need to replace SIM cards⁵²⁵. TMNL estimates that [...]. Hence, the Commission notes that [...], will not be equipped with e-SIMs in the near future.
- (759) In addition to the planning time needed for the migration process and the need to swap the SIM cards of all users, two further contractual obligations can hinder MVNOs from a smooth migration to a new host MNO:
- The results of the Market Investigation show that multi-sourcing is not used by Dutch MVNOs as they are generally subject to an exclusivity obligation with respect to their host MNO. The exclusivity provisions prevent MVNOs from a gradual migration to a new host. Also Simpel's wholesale agreement with TMNL contains an exclusivity clause⁵²⁶.
 - Minimum Purchase Commitment: MVNOs are typically subject to minimum purchase commitments⁵²⁷. [...] ⁵²⁸. [...].
- (760) The significant barriers to switching host MNO are reflected in the limited number of cases in which sizable MVNOs have switched host MNO in the past. The ACM Position Paper notes: "*Moreover, there are virtually no examples of MVNOs actually switching to a different MNO since 2010. The only case known to the ACM is the switch of LycaMobile from the Vodafone network to the KPN network in august 2013.*"⁵²⁹ While the Notifying Party emphasizes a few additional switching examples in the Response to the

⁵¹⁹ See responses to RFI 53 to non-MNOs of 11 July 2018, question 28.2.

⁵²⁰ Submission of Simpel dated 22 May 2018, paragraph 58 [ID: 2106].

⁵²¹ See [...].

⁵²² See Minutes of call of [...].

⁵²³ See responses to RFI 53 to non-MNOs of 11 July 2018, question 28.3.2.

⁵²⁴ See Response to the Statement of Objections, paragraph 938 and Annex 3(39).

⁵²⁵ See Response to the Statement of Objections, paragraph 940f.

⁵²⁶ See Annex 8(B)1 to Form CO, [...].

⁵²⁷ See responses to RFI 53 to non-MNOs of 11 July 2018, question 17.

⁵²⁸ See Annex 8(B)1 to Form CO, [...].

⁵²⁹ ACM Position Paper, p.10 [ID 2427].

Statement of Objections⁵³⁰, the Commission notes that none of the largest Dutch MVNOs have changed host in the last few years.

- (761) On this basis, the Commission considers that, while switching would be technically possible for Simpel, considerable barriers to switching exist as switching host MNO is a time consuming and costly process which increases the risk of customer churn and that requires considerable advance planning by Simpel.

B. Incentive to deteriorate Simpel's competitive position

- (762) [...] ⁵³¹. [...] ⁵³².

- (763) The Commission considers that, as a result of the Transaction, the merged entity may have less incentive to provide wholesale access services to Simpel.

- (764) In negotiations between MNOs and MVNOs, the incentives of both sides are misaligned. Because MNOs are vertically integrated and operate at both retail and wholesale level, there is a risk that they will lose some of their retail subscribers to the MVNOs they host. This is often referred to as "cannibalisation". The risk of cannibalisation means that MNOs face a trade-off when bidding for contracts to supply MVNOs. On the one hand, hosting MVNOs generates wholesale profits for the MNO. On the other hand, MVNOs can cannibalize the retail business of the host MNO as well as inducing a lower retail market price due to potentially increasing retail competition. If the MNO and the MVNO target the same customer groups, the higher the cannibalisation risk and vice versa so that. MNOs may be more inclined to provide wholesale access to MVNOs with a different profile than that of the MNO. In particular, the merged entity may have an incentive to protect its retail mobile market position by weakening MVNOs that compete for a broad spectrum of mobile customers, such as Simpel, as opposed to those that target niche customer groups that the MNO may not target itself. However, even if an MVNO targets similar retail customers as the MNO, the latter may have the incentive to host the MVNO to avoid that the MVNO chooses a different host MNO

- (765) As a result of the Transaction, compared to TMNL today, the merged entity will have a larger retail customer base and an increased brand portfolio. Therefore, a greater proportion of the business acquired by a mass-market MVNO will be from the merged entity and the retail losses resulting from the MVNO finding a host will be higher. Hence, wholesale terms which were profitable (when taking into account the cannibalisation effect at the retail level) in a stand-alone scenario for either party will be less profitable for the merged entity post-Transaction. This would reduce the incentives to offer commercially competitive MVNO terms to such operators (mainly in terms of wholesale rates, but also of access to new technologies etc.). Hence, the different market position of the merged entity at the retail level relative to the Parties on a standalone basis may induce the merged entity to compete less aggressively at the wholesale level.

- (766) The logic that a larger retail footprint leads to more cannibalisation is confirmed by the Notifying Party in the Response to the Statement of

⁵³⁰ See Response to the Statement of Objections, paragraph 944f.

⁵³¹ See reply of [...].

⁵³² See Minutes of meeting of [...].

Objections: *"The smaller an MNOs retail market share, the lower the risk of cannibalisation. The proportion of customers to be gained from competitors is larger than the proportion of TMNL/Tele2 NL customers that risk to be cannibalised. MVNOs are more likely to steal customers from larger downstream players KPN and VodafoneZiggo because those larger players have a larger customer base."*⁵³³. In this context, the Commission acknowledges that KPN is both the largest retail competitor and wholesale access provider.⁵³⁴ However, this does not contradict the Commission's cannibalization theory which relates to the change in incentive to provide attractive wholesale terms following the enlargement of the merged entity's retail footprint.

- (767) Simpel has submitted vertical gross upward pricing pressure indices ("vGUPPI") to quantify the reduced incentive of the merged entity to provide wholesale access to Simpel⁵³⁵. This analysis illustrates the negative effect of the enlarged retail footprint on the merged entity's incentive to provide wholesale access to Simpel. .
- (768) Moreover, [...] ⁵³⁶. In line with TMNL's internal documents, [...].
- (769) [...] ⁵³⁷.
- (770) [...], the Commission has investigated TMNL's general strategy with regard to wholesale agreement based on an internal document review. This analysis clearly confirms that TMNL takes cannibalisation effects into account, and hence is likely to do also in the context of the Transaction.
- (771) Several of DTAG's and TMNL's internal documents show that [...] ⁵³⁸.
- (772) In the Response to the Statement of Objections, the Notifying Party submitted additional evidence to show that [...] ⁵³⁹. However, the submitted evidence is limited to [...].
- (773) While TMNL hosts the MVNO Simpel, active in the mass market and competing with TMNL to a certain extent, [...] ⁵⁴⁰. The Notifying Party emphasizes [...] ⁵⁴¹. [...] ⁵⁴².
- (774) In summary, the Commission does not consider that TMNL has the incentive ([...]) to conclude wholesale deals which would allow MVNOs to become disruptive players in the market. TMNL takes into account possible cannibalisation effects both when targeting specific wholesale customers and when setting the wholesale terms and conditions. As it will have a large customer base overlapping with mass market MVNOs such as Simpel post-Transaction, the Transaction may increase the incentive of TMNL to partake in an input foreclosure strategy.

⁵³³ See Response to the Statement of Objections, paragraph 923.

⁵³⁴ See Response to the Statement of Objections, paragraph 933.

⁵³⁵ See Simpel's response to RFI 66 of 23 July 2018, Nera memo [ID 2376]. Please note that the full analysis will be made available in the Data Room.

⁵³⁶ See presentation of 11 July with Simpel.

⁵³⁷ See Minutes of meeting of [...].

⁵³⁸ A large number of additional documents [...].

⁵³⁹ See Response to the Statement of Objections, paragraph 911.

⁵⁴⁰ See Article 6(1)(c) Response, paragraph 480.

⁵⁴¹ See Response to the Statement of Objections, paragraph 929.

⁵⁴² See Minutes of call with [...].

C. *Effects*

- (775) For foreclosure to be anti-competitive, it must have a significant detrimental effect on competition downstream⁵⁴³, that is, on the Dutch retail mobile market. As explained in the Non-horizontal Merger Guidelines: "*significant harm to effective competition normally requires that the foreclosed firms play a sufficiently important role in the competitive process on the downstream market*"⁵⁴⁴.
- (776) The Commission considers that if the merged were to adopt an input foreclosure strategy post-Transaction and Simpel's position in the downstream retail market was negatively impacted as a result, this would not result in a significant impediment to effective competition on the retail market for mobile telecommunication services for the following reasons.
- (777) First, as discussed in Section 8.3.5, MVNOs generally do not exert significant competitive pressure in the Dutch retail mobile market.
- (778) Second, Simpel itself had a limited market share of [0-5]% in terms of subscribers and [0-5]% in terms of revenues in the Dutch market for retail mobile telecommunication services in 2017. [...]. While Simpel is successful in this segment, there are sufficient other competitors already active in this segment, including the MNOs' second brands. Simpel's product offering is not characterised by any significant differentiating features. This is mainly due to the fact that in terms of network quality and product innovation Simpel is already dependent on TMNL pre-Transaction. A full analysis of the competitive constraint exerted by MVNOs, including Simpel, is carried out in Section 8.3.5 of this Decision.
- (779) Third, the Commission's quantitative analysis on network level already accounts for the effects linked to Simpel and does not find significant predicted price effects. As explained in Section 8.3.10.2 and Annex A to this Decision, the Commission's network level analysis takes into account the effect of the elimination of competition between TMNL and Tele2 NL at the network level rather than by the pure retail level interaction between their respective brands. The Commission considers that the network level analysis proxies to a certain extent the potential wider effects of the Transaction. It accounts for the structural links present between the host MNO and the hosted MVNOs, or to take into account possible constraint related to the pricing conduct of the MVNOs. The network level analysis is able to proxy to a certain extent the weakening of the competition between Tele2 NL and the MVNOs on TMNL's network brought about by the Transaction. The Commission finds that the predicted price effects resulting from the Transaction remain moderate.
- (780) Given the limited competitive constraint exerted by Simpel and other MVNOs on the Dutch retail mobile market and the results of the quantitative analysis at the network level, the Commission does not consider that the deterioration of MVNO's wholesale access conditions would result in a significant impediment to effective competition.

⁵⁴³ Guidelines on the assessment of non-horizontal mergers under the Council Regulation on the control of concentrations between undertakings ("Non-horizontal Merger Guidelines"), paragraphs 32 and 47.

⁵⁴⁴ Non-horizontal Merger Guidelines, para. 48.

8.3.7.4. Conclusion

(781) In light of the above, the Commission concludes that while TMNL may have the ability and incentive to deteriorate Simpel's wholesale conditions post-Transaction which may further reduce the competitive constraint exerted by Simpel, the Commission does not consider that such a foreclosure strategy would result in a significant impediment to effective competition because it is unlikely that the potential deterioration of Simpel's wholesale access terms would have a significant impact on competition.

8.3.8. Spectrum asymmetry

(782) During the course of the Market Investigation, the two competing MNOs, KPN and VodafoneZiggo, raised concerns that the Transaction would result in a significant asymmetry in spectrum holdings between the MNOs remaining post-Transaction and that this could have a negative effect on competition because those competitors would be less able to compete or roll out new technologies. These respondents argue that the more spectrum an MNO holds, the more efficiently it can compete. They note that while in some circumstances this may lead to benefits for consumers, this case needs careful consideration given that: (i) the disparity in spectrum holdings between the merged entity and the remaining MNOs would allegedly be significant; and (ii) Tele2 NL obtained its spectrum under favourable conditions when the spectrum was set aside for a fourth entrant during the 2012 spectrum auction⁵⁴⁵.

(783) As indicated in Table 1 above, the current distribution of spectrum between the MNOs is as follows, on the basis of which it can be readily observed that no particularly striking asymmetry as regards spectrum holdings would in any case appear to arise as a result of the Transaction:

	800 MHz FDD	900 MHz FDD	1800 MHz FDD	2100 MHz FDD	2600 MHz FDD	2600 MHz TDD
TMNL	-	2x15	2x30	2x20	2x5	20
Tele2 NL	2x10	-	-	-	2x20	-
KPN	2x10	2x10	2x20	2x20	2x10	20
VodafoneZiggo	2x10	2x10	2x20	2x20	2x30	-

(784) Moreover, similar concerns have been raised and considered by the Commission in previous cases. For example in case *Hutchison 3G Italy/Wind/JV*, the Commission concluded that such a concern was not justified on the basis of a number of considerations, namely that: (i) the Transaction did not have any impact on the spectrum holdings of the competing MNOs, on the basis of which they were currently able to compete; (ii) the JV (in that case) would need to maintain both existing networks until the networks had been consolidated, and therefore would need more spectrum than the competing MNOs, which only operate one network; (iii) a spectrum asymmetry in and of itself does not necessarily lead to competition concerns, but might actually

⁵⁴⁵ See responses to RFIs 26 and 27 to KPN and VodafoneZiggo of 2 May 2018, questions 40 and 41 [ID 1175 and 2235 respectively].

stimulate competition among MNOs with differently sized spectrum holdings, since improved services stemming from an enlarged spectrum portfolio could force competitors to in turn improve their offerings, thus stimulating competition and (iv) a foreclosure or marginalisation of either of the competing MNOs due to the improved network of the combined entity was unlikely, as the other MNOs would hold sufficient spectrum enabling them to compete even post-Transaction⁵⁴⁶.

- (785) Each of these four arguments applies equally in the present case. It is self-evident that: (i) the spectrum holdings and existing ability to compete of KPN and VodafoneZiggo is unaffected by the Transaction; and (ii) the integration of the Parties' existing networks will require a certain amount of time during which the combined spectrum allocation will in any case be deployed as it is presently. Similarly, it has been acknowledged by VodafoneZiggo that "*in principle, VZ agrees to the Commission's finding in inter alia its decision Vodafone / Liberty Global / Dutch JV that asymmetry in spectrum as such does not necessarily lead to anti-competitive effects but may actually stimulate competition among MNOs with differently sized spectrum holdings*"⁵⁴⁷. Although VZ argues for a different assessment on the facts of the present case, it does not advance any detailed reasoning as to why the combined spectrum holding would result in a negative impact on competition.
- (786) In the present case it may also be noted that the upcoming spectrum auction in 2019 will also have an impact on the spectrum holdings of each of the MNOs and affords the opportunity for any needed additional spectrum licenses to be obtained. The aggregation of spectrum due to the Transaction will therefore lead to a situation which is limited in time, beyond which horizon the situation which will pertain cannot be anticipated at the moment of the present Decision. An analysis of this situation in isolation from other likely developments in relation to spectrum assignments in the relatively near term would therefore be unjustified.
- (787) Other than these issues raised by competitors, no other respondent during the Market Investigation in the present case has raised substantive concerns relating to the spectrum position post-Transaction.
- (788) Regarding the terms on which Tele2 NL initially obtained the spectrum which it currently operates as an MNO, the Commission considers that this results from the decision of the national regulator at that time and that the historical cost of this asset is not pertinent to the competitive assessment which the Commission is required to carry out under the Merger Regulation since it does not impact on the change in competitive conditions due to the Transaction.
- (789) The Commission therefore considers that the spectrum aggregation that the merged entity would obtain from the Transaction would not significantly impede KPN's and Vodafone Ziggo's ability to compete⁵⁴⁸.

⁵⁴⁶ See Commission Decision of 1 September 2016 in case M.775 – *HUTCHISON 3G ITALY/WIND/JV*, recital 847.

⁵⁴⁷ Response to RFI 27, paragraph 41.2 [ID 2235].

⁵⁴⁸ The Commission's competitive assessment of this concern is without prejudice to any possible further regulatory intervention by the ACM on the basis of its sectoral regulatory powers related to spectrum management insofar as such intervention remains compatible with the present Decision.

8.3.9. *Distributor complaints*

8.3.9.1. Views of distributors

(790) Responses from independent distributors to the Market Investigation regarding the impact of the Transaction on their businesses were mixed⁵⁴⁹. While some distributors argue that it will be beneficial to competition to have a stronger third player in the market, others have raised concerns regarding the viability of their businesses post-Transaction. In particular, some distributors raised concerns that: (i) the merged entity would reduce or cease sales through independent distributors; (ii) the bargaining power of the merged entity vis-à-vis distributors will increase reducing their ability to offer attractive deals to end customers; or (iii) the retail market will become less competitive with a negative impact on both distributors (who would be confronted with fewer price points/tariff plans to compare and a shrinking market) and end consumers. It was also pointed out that the merged entity would have a higher market share via the indirect distribution channel than via the direct distribution channel⁵⁵⁰.

8.3.9.2. Notifying Party's views

(791) The Notifying Party submits that independent distributors are a key distribution channel in the business segment, especially with regard to small- and medium sized enterprises, but represent a low proportion of sales for all Dutch MNOs in the private segment. Furthermore, the Notifying Party explains that indirect distributors can only re-sell subscriptions offered by mobile providers operating on the basis of an agency agreement under which they act on behalf of the operators in return for a fee for their sales activities. Based on these factors the Notifying Party concludes that the price impact from independent distributors on the retail market is currently limited.

8.3.9.3. Commission's assessment

(792) Independent distributors sell mobile contracts on behalf of MNOs, offering similar packages to those sold by MNOs through their direct distribution channels. Independent distributors receive a commission for each MNO contract entered into from the relevant MNO. This commission is the margin of the independent retailer. Often independent distributors pass-on part of this margin to their customers, for example through discounts, cheaper handsets etc., which means that they can offer highly competitive offers. In addition, large independent retailers act as an objective price comparison hub for different tariff plans between MNOs and provide advice to help customers make informed choices between MNOs.

(793) In light of the business model described above, the impact of independent distributors on retail prices is limited to the commission fees they received by the MNOs and it is constrained by the prices offered by the same MNOs. Therefore, independent distributors are not able to exert an important competitive constraint on MNOs.

(794) With regard to the merged entity's larger presence in indirect distribution, the Commission notes that the relevant market encompasses both direct and

⁵⁴⁹ See replies to RFI 24 to distributors of 2 May 2018, questions 42 and 43; and Submission of Belsimpel dated 26 March 2018.

⁵⁵⁰ [ID 3151]

indirect sales channels. In addition, the Telecompaper data presented in Section 6.5 does not confirm the complainants' claim that the Parties rely significantly more on indirect distribution than the other MNOs active on the Dutch market.

- (795) The price effects related to sales made via the indirect distribution channel are reflected in the Commission's quantitative assessment of the predicted prices effects, as set out in Section 8.3.10.2 of the Decision, as this analysis includes market players' sales revenues and volumes achieved via the indirect distribution channel.
- (796) In addition, the Commission's evidence on file does not suggest that the Transaction would significantly reduce the merged entity's incentive to use indirect sales channels.
- (797) The Commission concludes that, even if the reduction of the number of players in the retail market should have a negative impact on independent distributors, these players do not exert a competitive constraint on MNOs. Therefore, any possible negative impact on independent distributors would not significantly impede competition in the market for retail mobile telecommunications services in the Netherlands.

8.3.10. Quantitative analysis of the likely price effects of the Transaction

8.3.10.1. Introduction

- (798) The Commission has undertaken an in-depth quantitative assessment of the likely price effects of the elimination of horizontal competition on the Dutch market for mobile telecommunications services to private consumers resulting from the Transaction.
- (799) The analysis performed is a calibrated merger simulation and consists of an extension of the standard UPP framework presented in the Article 6(1)(c) Decision. The likely price change from this analysis provides a quantitative measure of the most direct unilateral effects, as indicated in the Horizontal Merger Guidelines⁵⁵¹, resulting from the elimination of competition between TMNL and Tele2 NL. The analysis also accounts for price reactions of the remaining competitors in the market. Therefore, the analysis allows estimating the likely total price effect that the Transaction would have across all operators, in each of the segments analysed.
- (800) The merging parties do not need to be each other's closest competitor for a unilateral price increase to be profitable for the merged entity. However, the closer the competition between the merging parties, i.e. the higher the diversion ratios between them, the stronger the merged entity's incentive will be to raise prices post-merger. Moreover, the higher are the observed margins, the higher will be the incentives to increase prices. Similarly, the price reactions by rivals will depend on their closeness of competition with the merging firms as well as rivals' margins.
- (801) The possibility of deterioration of competition post-Transaction may also take the form of the merged entity introducing fewer improvements in the services available than would have occurred in the absence of the Transaction. In the Commission's analysis, the finding that the Transaction would generate significant incentive to raise price is understood to encompass all mechanisms

⁵⁵¹ Horizontal Merger Guidelines, paragraph 24.

by which the merged entity could increase its margins relative to the situation absent the Transaction.

- (802) The analysis performed necessarily abstracts from a number of additional factors affecting the Parties pricing incentives (such as product repositioning or the existence of barriers to entry). Nevertheless, the applied framework captures, in the Commission's view, the most important factors (such as the relative closeness of competition between the Parties) determining how the Transaction will likely affect the mobile operators' pricing incentives. The Commission considers that the market features and dynamics outside the scope of this analysis. As such, the results should not be interpreted as providing a precise quantification of the exact increase in prices expected following the Transaction but only as an approximation of the change in pricing incentives post-Transaction.
- (803) A high level summary of the approach to the quantitative analysis of the horizontal non-coordinated effects is discussed in the following Section. Annex A presents a more comprehensive and technical outline of the quantitative analysis of the horizontal non-coordinated effects is presented in Annex A, where the Commission also presents its assessment of the arguments raised by the Notifying Party in the Response to the Statement of Objections as well its assessment of quantitative analysis submitted by the Notifying Party.

8.3.10.2. Outline of the analysis

- (804) The main inputs for the calibrated merger simulation are a measure of the diversion ratios across operators, a measure of prices and margins and a measure of quantities.
- (805) In its baseline scenario, the Commission has computed diversion ratios for the Parties based on the Survey (using the intensive and extensive survey questions). The diversion ratios for the other operators are based on MNP data.
- (806) The Survey did not target business customers due to the fact that business customers are likely not in control of their tariff plans decisions and are likely not to pay directly for their tariff plans. In addition, the business segment is not at the focus of the Commission's investigation in the present case. In the business segment, the Parties had a combined market share of [10-20]% by subscribers ([10-20]% by revenues) in 2017. This means that the business segment would not be affected individually in view of the Parties' limited combined share. The focus of the Commission's competitive assessment lies on the market segment for the retail provision of mobile telecommunication services to private customers in the Netherlands. This is also reflected in the Commission's quantitative assessment. If the business segment were to be included in the analysis, in light of the Parties' limited combined share, it is likely that the predicted price effects would be lower in the relevant overall market.
- (807) The analysis has been carried out at network level and at the provider level. For the former, switching is considered across the four networks only and each MVNO is aggregated under its host network. For the latter, switching is considered across all operators and MVNOs are treated as independent market players on par with the MNOs.
- (808) The Commission considers that the analysis based on diversion ratios at the provider level is useful to analyse the effect of the merger at the retail level

holding wholesale conditions for MVNOs fixed and treating MVNOs as fully independent at the retail level. Therefore, the analysis at the provider level does not account for any reduction of competition at the wholesale level nor of any change in incentive of the merged entity to serve the wholesale market, which would further undermine the effectiveness of the MVNO Simpel hosted on TMNL's network (see Section 8.3.7.1). Furthermore, the analysis at provider level assumes no price reaction from the market participants not included in the analysis, and hence, in this respect, rather provides a lower bound of the likely price effects post-Transaction.

- (809) The analysis at network level assumes that the effect of the elimination of competition between TMNL and Tele2 NL is captured by their positions at the network level rather than by the pure retail level interaction between their respective brands. The Commission considers that the network level analysis proxies to a certain extent these potential wider effects of the Transaction. This accounts for the structural links present between the host MNO and the hosted MVNOs in terms of financial incentives (e.g. the host MNO re-captures part of the margin lost by the MVNO via wholesale fees), or to take into account possible constraint related to the pricing conduct of the MVNOs.
- (810) As regards the margin figures, for its baseline scenario the Commission uses the contribution margins of each operator⁵⁵². The Commission has assessed the evolution of Tele2 NL's NRA costs and adjusted Tele2 NL's margin to reflect Tele2 NL's 2018 NRA costs, [...] (see further Annex A and Section 8.5 on efficiencies)⁵⁵³. Moreover, since the Commission accepts the Notifying Party's efficiencies claim in relation to the NRA, the Commission's quantitative analysis accounts for a decrease in the marginal costs of former Tele2 products the as a consequence of the Transaction.
- (811) Prices have been proxied by using a measure of ARPU and pre-Transaction quantities have been proxied by using the operators' gross adds.
- (812) The Commission has also carried out a number of sensitivity scenarios based on a number of alternative assumptions. These consist of: (i) the diversion ratios based on the unweighted intensive and extensive survey questions; (ii) using the MNP diversion ratios, (iii) using the diversion ratios based on the intensive survey question, (iv) using the diversion ratios based on the intensive and extensive survey questions applying an additional screening question, (v) using a conservative measure of margins, (vi) assuming a diversion to the outside good, and (vi) assuming a conservative measure of Tele2 NL's future NRA costs.

8.3.10.3.Results

- (813) The Commission has considered the effects of the Transaction on the overall private segment as well as the postpaid segment.
- (814) The price effects resulting from the Commission's baseline scenarios based on the 2017 contribution margins and on the intensive and extensive Survey question are presented in Table 24. The price effects already account for the

⁵⁵² As explained in Annex A, the Commission considers that the contribution margins, as opposed to the incremental margins, drive the operators' pricing decisions in the Italian retail mobile telecom market.

⁵⁵³ The underlying NRA cost estimate was adjusted following the Notifying Party's Response to the Statement of Objections. For further details, please refer to Annex A.

accepted efficiencies claim in relation to the elimination of the NRA. The table is divided in two panels. The left-hand panel reports the predicted price effects in the postpaid private segment, whereas the right-hand side of the panel reports the predicted price effects in the overall private segment. Each panel contains two columns, reporting the results of the analysis using diversion ratios at network level (first column) and using diversion ratios at provider level (second column). The last row of the table reports the average segment price effect, computed as revenue weighted average of the price effects of the operators.

- (815) When diversion ratios at the network level are considered, the segment-wide price effects are [5-10]% for postpaid and [0-5]% for the overall private segment. The price effects for TMNL are [5-10]% and [5-10]% in the postpaid and overall private segment, respectively. The price effects for Tele2 NL are [5-10]% for postpaid and [5-10]% for the overall private segment.
- (816) When diversion ratios at the provider level are considered, the segment-wide price effects are [0-5]% in the postpaid and [0-5]% in the overall private segment. The price effects in the postpaid segment are [0-5]% and [5-10]% for TMNL and Tele2 NL, respectively. In the overall private segment, the model predicts a price effect of [0-5]% for TMNL and [0-5]% for Tele2 NL.

Table 15 – Calibrated Merger Simulation baseline scenario results, 2017

	Postpaid Private		Overall Private	
	Network level	Provider level	Network level	Provider level
TMNL	[5-10]%	[0-5]%	[5-10]%	[0-5]%
Tele2 NL	[5-10]%	[5-10]%	[5-10]%	[0-5]%
KPN	[0-5]%	[0-5]%	[0-5]%	[0-5]%
VodafoneZiggo	[5-10]%	[0-5]%	[0-5]%	[0-5]%
Simpel		[0-5]%		[0-5]%
Youfone		[0-5]%		[0-5]%
AH Mobiel				[0-5]%
Lebara				[0-5]%
Lycamobile				[0-5]%
Segment Effect	[5-10]%	[0-5]%	[0-5]%	[0-5]%

- (817) Overall, the results of the baseline scenario indicate that the Transaction is likely to give incentives to the Parties as well as to the other market participants to increase prices. This would result in a moderate price increases in the overall private segment, while predicted prices increases in the postpaid segment are slightly more pronounced.

- (818) In order to verify the robustness of the baseline results, the Commission performed an extensive set of sensitivity analyses. These are presented in Annex A to this Decision. The results of these sensitivity analyses show that the conclusion of likely moderate price increases from the Commission's baseline quantitative analysis are robust to changes in the main assumptions.
- (819) The Commission sensitivity analysis focuses on the following dimensions.
- (820) First, a number of sensitivity analyses use different measures of diversion ratios. A number of sensitivities produce higher predicted price increases while other sensitivities produce lower price increases.
- (821) Second, the Commission has tested the sensitivity of its baseline results to the use of different margin measures and the introduction of an outside good. These sensitivities generally predict lower price increases compared to the baseline scenario.
- (822) Overall, the results of the Commission's quantitative analysis indicate that the loss of competition between the Parties gives rise to incentives of the merged entity to increase prices in the private segment. However, the predicted price effects are moderate.
- (823) Importantly, the Commission notes that its quantitative analysis does not take into account potentially reduced competitive pressure from Tele2 NL in the future.

8.3.10.4. Quantitative analysis submitted by the Notifying Party

- (824) The Notifying Party also submitted its own quantitative assessment for the effects of the Transaction on price and on consumer welfare. To this end, the Notifying Party first conducted a consumer survey presenting respondents with different combinations of fixed and mobile services and uses responses to estimate consumer preferences. The Notifying Party then adjusts the estimated model so that the implied market shares from the model match observed aggregate market shares, and the implied average profit margin of TMNL is also close to its observed average margin. Finally, the calibrated demand model is used to conduct merger simulation scenarios including scenarios in which the merged entity benefits from cost synergies and also improves the quality of its FMC products.
- (825) The Commission's assessment of the quantitative analysis submitted by the Notifying Party is discussed in Annex A. The Commission identified a number of shortcomings at each stage of the quantitative analysis.
- (826) Overall, the Commission considers that the results from the Notifying Party's discrete choice experiment survey cannot be considered reliable. Survey responses may not be representative, depend on respondents expressing preferences between fictitious products that do not exist and the design likely biases responses towards an overstatement of the competitive importance of FMC products.
- (827) As for the estimation of preferences from the survey responses, the Commission considers that the Notifying Party's methodology likely leads to unstable results which can have a significant impact on the overall outcome of the later simulations.
- (828) As regards the calibration, the Commission considers that the calibrated demand model is very sensitive to calibration choices. Moreover, the

Commission has the view that calibration, as implemented by the Notifying Party, unduly reduces the diversion ratios between the Parties. As the calibration is to a large extent done on an ad-hoc basis, the reliability of the model is compromised.

- (829) The Commission considers that the Notifying Party's simulation of the effects of the Transaction –and in particular the modelling of efficiencies- in the framework of its model is unreliable.
- (830) In conclusion, in particular for the above-mentioned reasons, the Commission maintains several concerns in relation to the Notifying Party's quantitative analysis. However, it is not necessary to take a final position on the question whether any probative value should be attached to the Notifying Party's quantitative analysis for the purposes of this Decision. This is because the Commission ultimately concludes that the Transaction does not give rise to a significant impediment to effective competition, which largely coincides with the findings of the Notifying Party's quantitative model.

8.3.11. Conclusion on non-coordinated horizontal effects

- (831) The Commission concludes that the Transaction would not significantly impede effective competition as a result of horizontal non-coordinated effects in the market for retail mobile telecommunication services in the Netherlands.

8.4. Coordinated horizontal effects on the market for retail mobile telecommunication services in the Netherlands

8.4.1. Notifying Party's views

- (832) The Notifying Party submits that the Transaction will not result in coordinated effects for the following reasons.
- (833) First, it argues that strong MVNOs present on the Dutch market would prevent a coordinated outcome from being maintained. It argues that non-MNOs would have an incentive to undercut any coordinated price increases and could easily capture a substantial proportion of the retail market. It considers that the unstable market conditions resulting from this aggressive market behaviour by non-MNOs make coordination unfeasible, now and post-Transaction.
- (834) Second, it argues that the products and pricing in the retail mobile market are too complex to be able to tacitly agree terms of coordination. The Notifying Party notes that this complexity arises from: (i) mobile products containing several dimensions (voice, data, SMS); (ii) tariffs being linked to a variety of handsets; (iii) complex pricing structures including both upfront fees and monthly fees; (iv) non-published special offers to retain existing customers; and (v) and bundle discounts. The Notifying Party also notes that while prices for retail customers are often public, pricing for business customers is not transparent.
- (835) Third, the Notifying Party argues that there would be no symmetry between the three MNOs post-Transaction. The Notifying Party submits that post-Transaction, the mobile retail market will be comprised of one large player (KPN), followed by two medium-sized players (VodafoneZiggo and TMNL), and a number of smaller players (the MVNOs). It also observes that the three MNOs will continue to have different retail strategies, offerings and network capabilities. In particular the merged entity would have a materially smaller fixed customer base and will not have its own fixed network. It argues that

because it is starting to offer FMC products later than KPN and VodafoneZiggo, it will have the incentive to behave disruptively rather than coordinate with the existing FMC players.

- (836) Fourth, it argues that Tele2 NL does not play a significant role on the mobile retail market and as such, the Transaction does not result in the removal of a disruptive force. It bases this argument on the following observations: (i) Tele2 NL cannot and does not compete on important parameters of competition such as network quality [...], (ii) it has a limited market share, has seen marginal growth and has failed to introduce any innovative products; and (iii) any price decreases on the market since its entry are not attributable to Tele2 NL.
- (837) Fifth, the Notifying Party argues that there is no evidence of past coordination. With regard to the ACM's in-depth investigation of the Dutch mobile telecommunications market between December 2011 and June 2013, the Notifying Party notes that the ACM conducted its investigation at a time when there were three MNOs on the market (as there would be post-Transaction) and did not find that there was tacit collusion in the market. It notes that while the ACM did find that certain public announcements had created a certain degree of risk of tacit coordination, that risk was addressed by commitments given by the three MNOs.

8.4.2. Commission's assessment

- (838) To assess coordinated effects, the case law⁵⁵⁴ and the Horizontal Merger Guidelines⁵⁵⁵, require proof that the merger will make coordination more likely, more effective and more sustainable. The Commission's assessment therefore focuses on the changes in terms of these factors that the Transaction will bring about. The Commission's assessment will focus on the following factors: (i) the ability to reach terms of coordination; (ii) whether such coordination would be sustainable, based on an assessment of: (a) the ability to monitor deviations from the terms of coordination; (b) the existence of a credible deterrent mechanism if deviation is detected; and (c) the reactions of outsiders such as current and future competitors not participating in the coordination, as well as customers, should not be able to jeopardise the results expected from the coordination.
- (839) As explained further below, the Commission considers that while there are a number of features of the Dutch mobile retail market that make it conducive to coordination, the Transaction is unlikely to result in an increased likelihood of coordination as material asymmetry will remain between the merged entity and the other MNOs on the market.

8.4.2.1. Possibility of establishing coordination

A. Concentrated market with few players

- (840) One of the factors making a market conducive to coordination is market concentration. The fewer and the bigger the competitors are, the easier it is to find a common strategy and to monitor it.

⁵⁵⁴ Case C-413/06 P, *Bertelsmann AG and Sony Corporation of America v Independent Music Publishers and Labels Association (Impala)* [2008] ECRI-4951; Case T-342/99, *Airtours v Commission* [2002] ECR II-2585.

⁵⁵⁵ Horizontal Merger Guidelines, paragraphs 39-57.

- (841) In this respect, the market for retail mobile telecommunication services in the Netherlands is very concentrated with four MNOs holding sizeable market shares which will be reduced to just three MNOs as a result of the Transaction. As detailed in Section 8.2.2, Table 3, KPN holds a market share of [30-40]% by revenues and subscribers, followed by VodafoneZiggo and the merged entity similarly having market shares of [20-30]% and [20-30]% by subscribers and [20-30]% and [20-30]% by revenues.
- (842) The post-Transaction HHI on the market for retail mobile telecommunication services would be considerable, namely [2500-3000] based on subscriptions and [2500-3000] based on revenues. The change in HHI pre- and post-Transaction on the retail market is moderate, namely [200-300] based on subscriptions and [200-300] based on revenues.

B. Market transparency

- (843) Transparency is important to enable the coordinating firms to reach a common understanding of the terms of coordination⁵⁵⁶, as it allows firms to observe the moves of their competitors and adapt their own decisions accordingly. Transparency is also important to enable the coordinating firms to monitor deviations from the coordinated behaviour⁵⁵⁷. In particular, according to the General Court, "*price transparency is a fundamental factor in determining the level of market transparency where there is an oligopoly*"⁵⁵⁸.
- (844) The Commission considers that the Dutch retail mobile market is characterised by a high degree of transparency as regards prices and product offerings of the MNOs. In particular, the prices and product offerings of the MNOs are publicly available from the MNOs' websites, from retail shops and from several price comparison websites.

C. Product differentiation

- (845) Coordination is easier to achieve when products are homogeneous⁵⁵⁹. Product homogeneity reduces the number of parameters that need to be observed and makes it easier to compare prices, thereby facilitating the finding of a focal point for coordination.
- (846) All MNOs offer, as a core product, connectivity packages that include mobile voice, SMS and data. Beyond this, there are a number of ways in which the mobile offering can be differentiated, for example: (i) the composition of the mobile elements; (ii) bundling with other telecommunications services; and (iii) handset subsidies.
- (i) Mobile element composition
- (847) MNOs offer a number of mobile tariffs typically consisting of several components (voice minutes, SMS and data), corresponding to different prices. The majority of tariffs (in particular post-paid) are pre-designed flat-rate tariffs, where subscribers pay a fixed periodic (e.g. monthly) fee allowing them to consume data, voice and SMS up to a certain volume. The pre-designed bundles offered by MNOs can be distinguished from one another essentially on

⁵⁵⁶ Horizontal Merger Guidelines, paragraph 47.

⁵⁵⁷ Horizontal Merger Guidelines, paragraph 49.

⁵⁵⁸ Case T-102/96, *Gencor v. Commission* [1999] ECR II-753, paragraph 227.

⁵⁵⁹ Horizontal Merger Guidelines, paragraph 45.

the basis of their size, i.e. the volume of GB, minutes and SMS included in the bundle. Mobile tariffs may be meaningfully quantified, arranged and compared with one another, thus leading to a certain degree of standardisation, at least on the supply side, which is a factor that may facilitate the convergence of the MNOs on a coordinated strategy.

(848) In the Dutch market, there is a clear trend towards mobile subscriptions to include unlimited voice and SMS with the differentiation coming only from the size of the data bundle. This trend has therefore increased the degree of homogeneity in the market.

(ii) FMC

(849) As in other Member States, an increasing number of Dutch customers are purchasing their mobile and fixed telecommunications services from a single provider in a bundle. According to the ACM Position Paper, in Q1 2018 around 15% of all the SIMs in the Netherlands (excluding M2M) were sold in a bundle with a fixed telecommunications product, and that this will increase to around 22% by the end of 2022.

(850) As described above in Section 6.4, when customers purchase mobile and fixed services, they are entitled to a number of additional products. This has the potential to increase heterogeneity in the types of products available on the market, in particular if some players compete with FMC offers but others do not (or only to a limited extent, such as TMNL today).

(851) This is not currently observed in the Dutch market; the benefits currently offered by KPN and VodafoneZiggo for buying an FMC bundle are similar in a number of regards as both include: (i) double mobile data; (ii) EUR 5 reduction on the mobile contract; and (iii) a free television package. There are however material differences; VodafoneZiggo also offers the ability to pool data between household members and free calling within between members of a household whereas KPN offers an internet security package.

(852) The Notifying Party argues that as a result of the Transaction, it will be better able to offer FMC offers to consumers. To the extent this is the case, this would increase the degree of product composition homogeneity post-Transaction.

(iii) Handset subsidies

(853) Handset subsidies can increase product differentiation in the market, for example because of the range of different handsets themselves, the levels of subsidies and the contractual terms attached to them. The Commission notes that the sales of handset subscriptions are declining (see Figure 11) in the Dutch market following a ruling of the Dutch Supreme Court in 2014 which set up a number of requirements that need to be met for a handset subscription to be sold (see recital 42). As a result, the effects of this differentiating factor will be limited and may increase homogeneity going forwards.

(iv) Conclusion

(854) In summary, the Commission rejects the Notifying Party's arguments that the products and pricing in the retail mobile market are too complex to be able to tacitly agree terms of coordination given that: (i) the composition of the mobile elements is generally the same and has become increasing homogenous with unlimited voice and SMS; (ii) while bundling with other telecommunications

services may increase complexity, this is not observed in the Dutch market; and (iii) the decreasing relevance of handset subsidies.

D. Symmetry

- (855) Firms may find it easier to reach a common understanding on the terms of coordination if they are relatively symmetrical⁵⁶⁰, especially in terms of cost structures, market shares, capacity levels and levels of vertical integration. The reason why symmetry is conducive to coordination is two-fold. First, when firms are similar, it is easier for them to tacitly agree on a common course of action to maximise their joint profits. Second, such conduct is appreciably more likely to be successful. This is because the existence of even a single smaller maverick with misaligned incentives can disrupt the ability of other firms to coordinate prices.
- (856) The Commission has considered whether the Transaction increases the degree of symmetry on two parameters: (i) market shares on the retail mobile market; and (ii) the degree of fixed / mobile integration.
- (i) Market shares on the retail mobile market
- (857) As can be seen from Table 3 in Section 8.2.2.1, the Transaction would increase the market share of TMNL from [10-20]% to [20-30]% based on subscribers and [20-30]% to [20-30]% by revenues. Post-Transaction, KPN will remain materially larger with a market share of [30-40]% by subscribers and revenues. VodafoneZiggo becomes the third player by subscribers with [20-30]% but remains the second largest player by revenues with [20-30]%.
- (858) The Transaction therefore increases the degree of symmetry based on retail mobile market shares as TMNL becomes far closer in size to VodafoneZiggo compared to the situation today, where VodafoneZiggo is larger than TMNL and Tele2 NL has a materially smaller market share than the other three players. This said, a degree of asymmetry will remain on the market given the different position of KPN as the largest player on the market.
- (ii) Degree of fixed / mobile integration
- (859) Today, TMNL and Tele2 NL each have limited fixed assets. In contrast, KPN owns and operates two fixed line telecommunications networks in the Netherlands: (i) a fibre to the home network which reaches [20-30]% of Dutch households; and (ii) a hybrid fibre-copper network which serves the rest of the households. Equally, VodafoneZiggo operates a hybrid fibre-coax network covering over [90-100]% of Dutch households.
- (860) As noted above, the ACM estimates that by the end of 2022, approximately 22% of all SIMs sold will be in a bundle with fixed telecommunication services. Accordingly, the asymmetry in the fixed network assets between KPN, VodafoneZiggo and the merged entity creates heterogeneity, which may reduce the ability of the MNOs to reach a coordinated outcome on the retail mobile market, in particular because the merged entity will have: (i) a different cost structure for offering FMC bundles; and (ii) a far more limited fixed customer base to which they can cross sell retail mobile telecommunications.

⁵⁶⁰ Horizontal Merger Guidelines, paragraph 48.

- (861) With regard to the cost structure, to be able to offer fixed services either standalone or as part of an FMC bundle, the merged entity is reliant on a wholesale access agreement with either KPN or VodafoneZiggo. The ACM noted in its recent study on the role of FMC in the Netherlands⁵⁶¹ that: "...providers that depend on wholesale access, such as Tele2 and TMNL, incur greater risk and generally have lower margins than providers that have their own networks (KPN and VodafoneZiggo)".
- (862) The Notifying Party argues that the Transaction will materially increase its ability to offer converged FMC offers. However, as neither of the Parties is contributing significant fixed assets to the merged entity, post-Transaction the fixed component of any FMC bundle its offers will still, in the most part, be reliant on a wholesale access agreement. On other hand, KPN and VodafoneZiggo will continue to fully integrated fixed-mobile players with their own fixed and mobile infrastructures.
- (863) With regard to the differing customer bases, KPN and VodafoneZiggo each have a markedly different position on the fixed market compared to the merged entity. As shown in Table 16, the size of each of KPN and VodafoneZiggo's fixed customer bases are not comparable with that of the merged entity.

Table 16 – Market shares on the fixed broadband market for: (i) consumer and business; and (ii) consumer only (2017)

	Consumer and business broadband market shares		Consumer broadband market shares	
	Number of subscribers	%	Number of subscribers	%
KPN	[3000-4000]	[40-50]	[3000-4000]	[40-50]
VodafoneZiggo	[3000-4000]	[40-50]	[3000-4000]	[40-50]
TMNL	[0-1000]	[0-5]	[0-1000]	[0-5]
Tele2 NL	[0-1000]	[0-5]	[0-1000]	[0-5]
Combined	[0-1000]	[0-5]	[0-1000]	[0-5]
Others	[0-1000]	[5-10]	[0-1000]	[5-10]
Total	[7500-8500]	100.0	[7300-8500]	100.0

Source: Notifying Party's estimates – Annex 6(2) to the Form CO

- (864) The Commission's investigation indicates that in the Dutch market, the fixed component is often the deciding factor in a customer's purchasing decision for an FMC bundle. This is recognised by the ACM, which notes in its recent report that: "*the contract holder for the fixed services subscription is probably more often the decision maker in a household than the contract holder for the*

⁵⁶¹ ACM study, Bundling of telecom services and content in the Netherlands, July 2017, p. 14. Provided as Annex 5(14)(4)(1) to the Form CO.

*mobile subscription, which provides an additional advantage in the recruitment of bundle customers from the existing customer basis.*⁵⁶²

- (865) The Commission considers that as the merged entity will not have this large base of fixed customers to cross sell mobile services, it will continue to compete on the market using different techniques and strategies to KPN and VodafoneZiggo.
- (866) To the extent that the merged entity has a greater ability to offer FMC products post-Transaction as it argues, it will still only have [5-10]% of the fixed customer base and will therefore continue to have to compete in a different manner to one of the main ways in which KPN and VodafoneZiggo do.
- (867) In summary, there is asymmetry in cost structure for offering FMC bundles and the merged entity will have to employ different strategies when selling mobile services both in an FMC bundle and as a standalone product compared to KPN and VodafoneZiggo. Given that the Transaction does not increase homogeneity in either of these respects, the Commission does not consider that the Transaction increases the likelihood of the remaining players reaching a coordinated outcome.

8.4.2.2. Sustainability of coordination

A. *Monitoring*

- (868) As noted above, the Commission considers that there is a degree of transparency in the Dutch mobile retail market that could potentially allow for the coordinating firms to monitor any deviations from a coordinated outcome.
- (869) However, as noted above in recital 867, the evidence on the file is insufficient to infer on which terms a coordinated strategy would take place in the first place given the asymmetry of the three MNOs on the market.

B. *Deterrent mechanism*

- (870) The Commission has not identified any evidence on the file that would indicate that the Transaction would be likely to enhance the availability and/or efficiency of any deterrent mechanisms from deviating from a coordinated outcome, and the scope of retaliation if detected.
- (871) Moreover, as noted above in recital 867 the evidence on the file is insufficient to infer on which terms a coordinated strategy would take place in the first given the asymmetry of the three MNOs on the market.

C. *Reaction of outsiders*

- (872) In the event that the coordination is between the three remaining MNOs on the market, outsiders that could potentially disrupt a coordinated outcome are either: (i) new MNO entrants; (ii) MVNOs (current or entrant); or (iii) customers.
- (873) With regard to MNO entrants, the Commission does not consider that the threat of MNO entry is credible. In previous decisions, the Commission concluded that entering the market for retail mobile telecommunications services as an MNO presents significant difficulties, due to the need to acquire spectrum and

⁵⁶² See ACM, "Advies Multibandveiling 2019", 10 October 2017, paragraph 127, Form CO Annex 5(14)(4)(2).

build a radio network and the related requirements⁵⁶³. There are no indications that the situation would be different in the present case and indeed, the not-insignificant costs and investments necessary are acknowledged by the Notifying Party.

- (874) Second, in response to the Market Investigation, none of the MNOs or MVNOs that responded considered that it was likely that an MNO would enter the Dutch telecommunications market in the next 2 – 3 years⁵⁶⁴.
- (875) With regard to MVNOs, the Commission does not consider that either current MVNOs, or potential entrant MVNOs would place a sufficient constraint such as to disrupt any potential coordinated outcome.
- (876) While entering the market as an MVNO is easier than entering the market as an MNO since MVNOs do not need to build their own radio network however it still requires a certain level of investment and planning, in particular for full MVNOs⁵⁶⁵.
- (877) Second, even if MVNO entry were to be considered as timely and likely, the Commission has reached the conclusion that MVNO entry is unlikely to be sufficient to deter or defeat any potential anti-competitive effects of the merger given that: (i) MVNO entry is likely to be limited to specific niches; and (ii) as explained in Section 8.3.5.2.C, MVNOs are generally not able to compete strongly against MNOs.
- (878) With regard to customers, the Commission considers that neither private nor business customers would have sufficient countervailing buyer power vis-à-vis the merged entity to disrupt any potentially coordinated outcome given the fragmented nature of their demand. Other than a limited group of large businesses, customers do not negotiate their mobile contracts and their individual subscription value would be of no material commercial significance to the merged entity.
- (879) However, as noted above in recital 867, the evidence on the file is insufficient to infer on which terms a coordinated strategy would take place in the first place given the asymmetry of the three MNOs on the market.

8.4.2.3. Impact of the Transaction on the ability to reach and sustain a coordinated outcome

- (880) As noted above, in assessing the likelihood of whether a transaction will increase the likelihood of the remaining players reaching a coordinated outcome, the Commission examines whether it would be possible to reach terms of coordination and whether the coordination is likely to be sustainable.
- (881) In this respect, the Commission considers the changes that the merger brings about. The reduction in the number of firms in a market may, in itself, be a factor that facilitates coordination. However, a merger may also increase the likelihood or significance of coordinated effects in other ways. For instance, a

⁵⁶³ See Commission decision of 28 May 2014 in case M.6992 - *Hutchison 3G UK/Telefónica Ireland*, recitals 262-269; Commission decision of 2 July 2014 in case M.7018 - *Telefónica Deutschland/E-Plus*, recitals 845-848; Commission decision of 12 December 2012 in case M.6497 - *Hutchison 3G Austria/Orange Austria*, recitals 287-292

⁵⁶⁴ See responses to RFIs 26 and 27 to KPN and VodafoneZiggo of 2 May 2018, question 34 [ID 1175, 2235]; and RFI 23 to non-MNOs of 2 May 2018, question C.E.1

⁵⁶⁵ See for example, Commission decision of 1 September 2016 in case M.7758 – *Hutchinson 3G Italy/WIND/JV*, recitals 907 - 910

merger may involve a ‘maverick’ firm that has a history of preventing or disrupting coordination, for example by failing to follow price increases by its competitors, or has characteristics that gives it an incentive to favour different strategic choices than its coordinating competitors would prefer. If the merged firm were to adopt strategies similar to those of other competitors, the remaining firms would find it easier to coordinate, and the merger would increase the likelihood, stability or effectiveness of coordination.

- (882) A number of respondents of the Market Investigation have noted that they consider Tele2 NL to be an important competitive force on the Dutch market. For example, in its Position Paper, the ACM even characterised Tele2 NL as a "maverick player"⁵⁶⁶.
- (883) As explained above in Section 8.3.2.2, the Commission concludes that Tele2 NL cannot be considered an important competitive force within the meaning of paragraphs 37 – 38 of the Horizontal Merger Guidelines on the retail mobile telecommunications market in the Netherlands in light of: (i) its limited market share; (ii) its competitive behaviour and performance; and (iii) its network limitations; and (iv) the fact that even though it is likely that Tele2 NL would continue operating [on the same basis] in the Dutch market in the absence of the Transaction, its competitive strength will likely deteriorate.
- (884) Accordingly, the Commission doubts the ability of Tele2 NL's ability to either prevent the establishment or maintenance of a coordinated outcome in the future. Accordingly, the Commission does not consider that the removal of Tele2 NL from the market as a result of the Transaction will result in a material change compared to the situation absent the Transaction.

8.4.3. Conclusion on horizontal coordinated effects

- (885) The Commission concludes that several features of the Dutch retail market for mobile telecommunications services may be conducive to coordination.
- (886) However, the Commission concludes that the Transaction would not significantly impede effective competition as a result of horizontal coordinated effects in the market for retail mobile telecommunication services in the Netherlands, in particular given that the asymmetry between the merged entity on the one hand, and KPN and VodafoneZiggo on the other, which would not be materially eliminated by the Transaction.

8.5. Efficiencies

- (887) In the present case, the Notifying Party submits that the Transaction would bring about substantial efficiencies. Since the Commission concludes that the Transaction would not significantly impede effective competition, it is not necessary to assess the efficiency arguments raised by the Notifying Party. The Commission has, however, nevertheless, assessed the Notifying Party's argument that, as a consequence of the Transaction, the roaming fee that Tele2 NL currently pays to TMNL for providing access to the 2G and 3G network to its customer base will be internalised by the merged entity (see Section 8.5.2).

⁵⁶⁶ ACM Position Paper, page 5 [ID 2427]. See also response to Question C.B.6.3, MVNO questionnaire RFI 23. When asked directly whether they consider Tele2 NL to be a maverick on the market, the responses were generally in the affirmative.

- (888) For its assessment, the Commission has reviewed the relevant submissions. Consistent with previous cases⁵⁶⁷ and relevant case law⁵⁶⁸, in the following recitals the Commission will assess whether each submitted efficiency claim fulfils the criteria set out in the Horizontal Merger Guidelines.

8.5.1. Framework of assessment

- (889) The Commission's framework for assessing efficiencies resulting from a merger is set out in paragraphs 77 and 78 of the Horizontal Merger Guidelines:

"The Commission considers any substantiated efficiency claims in the overall assessment of the merger. It may decide that, as a consequence of the efficiencies that the merger brings about, there are no grounds for declaring the merger incompatible with the common market pursuant to Article 2(3) of the Merger Regulation. This will be the case when the Commission is in a position to conclude on the basis of sufficient evidence that the efficiencies generated by the merger are likely to enhance the ability and incentive of the merged entity to act pro-competitively for the benefit of consumers, thereby counteracting the adverse effects on competition which the merger might otherwise have.

For the Commission to take account of efficiency claims in its assessment of the merger and be in a position to reach the conclusion that as a consequence of efficiencies, there are no grounds for declaring the merger to be incompatible with the common market, the efficiencies have to benefit consumers, be merger specific and be verifiable. These conditions are cumulative".

- (890) The Commission will therefore consider positive effects of efficiencies that benefit consumers as part of its overall assessment of the concentration, provided the efficiencies are substantiated and satisfy the three cumulative criteria:
- (a) Efficiencies have to be verifiable such that the Commission can be reasonably certain that the efficiencies are likely to materialise and be substantial enough to counteract a merger's potential harm to consumers⁵⁶⁹;
 - (b) Efficiencies have to be a direct consequence of the concentration and cannot be achieved to a similar extent by less anticompetitive alternatives⁵⁷⁰; and
 - (c) Efficiencies have to benefit consumers in the sense that they should be substantial and timely and should, in principle, benefit consumers in those relevant markets where it is otherwise likely that competition concerns would occur⁵⁷¹.

⁵⁶⁷ Commission's decision of 28 May 2014 in case M.6992 – *Hutchison 3G UK/Telefónica Ireland*, section 7.1, Commission's decision of 01 February 2012 in case M.6166 – *Deutsche Börse/NYSE Euronext*, section 12, Commission decision of 2 July 2014 in case No M.7018 – *Telefónica Deutschland/E-Plus*, section 6.9. Commission decision of 11 May 2016 in case No M.7758 – *Hutchison 3G UK / Telefonica UK* section 8.4. Commission decision of 1 September 2016 in case M.7758 - *Hutchison 3G Italy / Wind / JV*, section 7.5.

⁵⁶⁸ Judgment of the General Court of 9 March 2015, T-175/12, *Deutsche Börse AG v Commission*, EU:T:2015:148, paragraphs 281-288.

⁵⁶⁹ Horizontal Merger Guidelines, paragraph 86.

⁵⁷⁰ Horizontal Merger Guidelines, paragraph 85.

⁵⁷¹ Horizontal Merger Guidelines, paragraph 79.

- (891) The Horizontal Merger Guidelines further explain that the burden of proof for showing that efficiencies fulfil the above criteria lies with the merging Parties as most of the information is solely in their possession. It is, therefore, incumbent upon the Parties to provide in due time all the relevant information necessary to demonstrate that the claimed efficiencies are merger-specific and likely to be realised. Similarly, it is for the Parties to show to what extent the efficiencies are likely to counteract any adverse effects on competition that might otherwise result from the merger, and therefore benefit consumers⁵⁷². Furthermore, evidence relevant to the assessment of efficiency claims should include, in particular, internal documents that were used by the management to decide on the merger, statements from the management to the owners and financial markets about the expected efficiencies, historical examples of efficiencies and consumer benefit, and pre-Transaction external experts' studies on the type and size of efficiency gains, and on the extent to which consumers are likely to benefit⁵⁷³.
- (892) According to the Commission's practice, the assessment of the benefit to consumers from efficiencies and the competitive harm that might result from the merger should consider the same period of time. The harm arising from a merger might already impact consumers shortly after the merger. This implies that in order to be considered as a balancing factor the efficiencies must be timely⁵⁷⁴. In this regard, concerning the cost synergies submitted by the Parties, the Commission notes that the cost synergies will reach run-rate⁵⁷⁵ stage in year 2021. Before that only part of the synergies would be realised due to the merger integration process. For this reason, in the present case the Commission's assessment of the efficiencies considers the benefit to consumers expected during the period 2018-2021 but the analysis of cost synergies will consider in particular the expected run-rate synergies following the network integration phase (i.e. from year 2021). The Commission notes that this approach, in this specific case, is in the Parties' favour as the run-rate synergies from 2021 are higher than the average annual synergies expected in the period 2018-2020⁵⁷⁶. Concerning efficiency claims other than cost synergies, the Commission in principle also takes benefits into account which can be achieved in a timely fashion, and the relevant period is not limited to 2021.

8.5.2. *Elimination of double marginalisation concerning Tele2's NRA*

8.5.2.1. Notifying Party's view

The Notifying Party claims that as a consequence of the Transaction the roaming fee that Tele2 NL currently pays to TMNL for providing access to the 2G and 3G network to its customer base will be internalised by the merged entity. In the Form CO the Notifying Party estimates roaming charges of EUR [...] on an annual basis. According to later estimates of Tele2 NL its total NRA roaming cost will be EUR

⁵⁷² Horizontal Merger Guidelines, paragraph 87.

⁵⁷³ Horizontal Merger Guidelines, paragraph 88.

⁵⁷⁴ Horizontal Merger Guidelines, paragraph 83.

⁵⁷⁵ At run rate efficiencies, expressed in annual terms, are the fully realised and then expected to remain constant also for future years. Run-rate efficiencies are an extrapolation on the basis of the information available at the time of the merger.

⁵⁷⁶ Further, the assessment of the run-rate synergies of 2021 can also be taken as a proxy for the years beyond the period 2018-2021.

[...] in 2019, EUR [...] in 2020 and EUR [...] in 2021⁵⁷⁷. The Notifying Party further claims that the elimination of the roaming charge would be comparable to a variable cost saving.

8.5.2.2. Commission's assessment

A. *Benefit to consumers*

- (893) According to the Commission's practice, variable or marginal cost reductions are more likely to be passed on to consumers than fixed cost savings, as they directly affect firms' pricing incentives⁵⁷⁸. The reason is that a reduction in the marginal costs of serving additional customers increases the margin earned on such customers and hence the incentive to attract additional customers through lower prices.
- (894) According to the NRA national roaming costs are charged for actual traffic and hence the Commission considers these costs to be variable. In Tele2's internal documents, [...] (see Annex A). Post-Transaction, the merged entity will not require the NRA anymore to provide the products previously offered by Tele2 NL.
- (895) Hence, the Commission considers that the elimination of Tele2 NL's variable costs related to the NRA would likely be partly passed on to consumers in terms of lower prices. Within the Commission's quantitative framework, the pass through of variable cost savings to subscribers is treated similarly to the pass-through of upward pricing pressure from the loss of competition between the Parties. The Commission considers that this similar treatment is justified by the similarity of these concepts from an economic point of view⁵⁷⁹.

B. *Verifiability*

- (896) The Commission accepts that the elimination of the roaming charge would correspond to a variable cost reduction for Tele2 NL. Nevertheless, the Commission notes that roaming costs have declined significantly during the past years. Roaming costs amounted to EUR [...] in 2015 and grew to EUR [...] in 2016 as the customer base of Tele2 NL grew from less than [...] to more than [...] customers. Then in 2017 roaming costs decreased to about EUR [...] despite the increase in Tele2 NL's customer base and the increase in average data consumption⁵⁸⁰. In 2018 Tele2 NL's roaming fee is expected to be about EUR [...]⁵⁸¹.
- (897) Based on data provided by Tele2, the average NRA cost per residential customer was around EUR [...] in 2017. Based on the latest applicable NRA terms and on data provided by Tele2 NL, the average cost per residential customer will drop to around EUR [...] for the years 2018-2021, respectively⁵⁸². [...].

⁵⁷⁷ Response to the Statement of Objections, paragraph 1110.

⁵⁷⁸ Horizontal Merger Guidelines, paragraph 80.

⁵⁷⁹ See also *Orange /Jazztel* decision, paragraph 744.

⁵⁸⁰ For the figures from 2015 to 2017 Annex 5 RFI 67

⁵⁸¹ Annex 5 to RFI 67 [ID 1670-4; M.8792 – Annex 5 RFI 67 – iPF Tele2 V4..xlsx], Annex 1 RFI 74 file [...], and Annex 1 RFI 74 file “[...]”

⁵⁸² Based on forecasts contained in file - [...].

C. *Merger specificity*

- (898) The Commission considers the savings related to Tele2 NL's national roaming costs to be merger specific as they are unlikely to be achieved by other means.

8.5.2.3. Conclusion on efficiencies related to elimination of the NRA

- (899) On the basis of the above assessment, the Commission considers that the efficiency claim related to the NRA put forward by the Notifying Party satisfies the three cumulative criteria required under the Merger Guidelines of benefit to consumers, merger specificity and verifiability.

8.5.3. *Further efficiency claims*

8.5.3.1. Notifying Party's view

- (900) The Notifying Party claims that variable cost savings are expected to be generated in the non-technology area (EUR [...] annual run rate from 2021), both for the mobile (EUR [...])⁵⁸³ and the fixed business (EUR [...]), and in the full time equivalent ("FTE")⁵⁸⁴ area (EUR [...]), only for the fixed business. These follow from increased negotiation power, the optimisation of joint expenditures and increase in scale. The Notifying Party also submits that the savings are specific to the Transaction.
- (901) The Notifying Party further submits that fixed cost efficiencies are expected to be generated in the technology area (EUR [...]), non-technology area (EUR [...]), in the FTE area (EUR [...]) and in CAPEX (EUR [...]). These follow from common overhead costs and the optimisation of joint expenditures and, according to the Notifying Party, will improve the merged entity's ability to offer better services and better value to customers by releasing significant financial resources. The Notifying Party also submits that the fixed cost savings are specific to the Transaction and are not attainable under other less anticompetitive alternatives.
- (902) The Notifying Party claims that the Transaction will enable an earlier and more extensive roll-out of 5G [...] ⁵⁸⁵. The Notifying Party also submits that the advanced 5G roll-out will result in significant benefits to consumers and businesses.
- (903) The Notifying Party further claims that the Transaction will enable the merged entity to offer more competitive FMC products. [...] ⁵⁸⁶.
- (904) The Notifying Party also claims that TMNL by having access to Tele2 NL's 800 Mhz and 2600 MHz spectrum and the existing sites in rural areas [...] ⁵⁸⁷. [...].
- (905) The Notifying Party also contends that in the context of its 5 promises⁵⁸⁸ the merged entity committed to extend its fibre footprint by 0.5 million households

⁵⁸³ Unless stated differently, cost savings in brackets refer to the annual run rate from 2021.

⁵⁸⁴ FTE is a unit measure of employee workload such that the workload such that the workload is comparable across different classes of load.

⁵⁸⁵ The Notifying Party also pointed to the promise that the merged entity will launch nationwide 5G in 2020.

⁵⁸⁶ Form CO Annex 8A(3).

⁵⁸⁷ See Form CO, paragraph 1321. The Notifying Party also pointed to the promise that the merged entity will make 100 Mbit/s broadband speeds available and close the digital divide in the Netherlands, targeting 2020.

on Optical Distribution Frame ("ODF") and/or partner for further fibre rollout. This is combined with a commitment not to raise fixed internet access prices beyond inflation. Moreover, the merged entity also commits to pass on any future regulatory wholesale access charge reductions to its customers. According to the efficiencies generated by this merger (described below) will secure the funding needed for this promise.

- (906) Furthermore, in the context of the 5 promises, the merged entity committed to: (i) offer unlimited on the Tele2 brand data for maximum EUR 25 for a period of 3 years; and (ii) to offer all customers a "no lock-in option".
- (907) The Notifying Party further puts forward the claim that the Transaction would not only benefit consumers from a static point of view but that it would also continue to provide benefits to consumers as a result of dynamic efficiencies. Specifically, the Notifying Party argues that the creation of an FMC challenger would also lead to dynamic efficiencies in the form of continued: (i) higher quality; (ii) more innovative offers; and (iii) better value for mobile, fixed and FMC offers⁵⁸⁹.
- (908) Finally, the Notifying Party submits that the combination of the Parties customer bases, which in the Notifying Party's view are complementary, allows the Notifying Party to up-sell, cross-sell and deep-sell their products to existing subscribers, and attract new subscribers in segments where the Parties' respective business currently do not have a strong presence⁵⁹⁰.

8.5.3.2. Commission's assessment

- (909) In the Statement of Objections, the Commission reached the preliminary conclusion that these further efficiency claims did not meet the three cumulative criteria set out above in recital 890 for a number of reasons. Given that the Transaction does not give rise to a significant impediment to effective competition on the relevant market(s) even without accepting any of these further efficiency claims, it can be left open whether any of the further efficiency claims meets the three cumulative efficiencies criteria set out in recital 890 above.

8.5.4. *Conclusion on efficiencies*

- (910) For the above-mentioned reasons the Commission accepts the efficiencies claim related to the elimination of the NRA. It can be left open whether any of the further submitted efficiency claims meet the three cumulative efficiencies criteria.

9. CONCLUSION

- (911) For the reasons set out in Section 8, the Commission finds that the Concentration would not significantly impede effective competition in respect of the provision of retail mobile telecommunication services in the Netherlands.

⁵⁸⁸ See Response to the Statement of Objections, paragraph 1208t

⁵⁸⁹ See Form CO, paragraphs 1312-1320.

⁵⁹⁰ Form CO, paragraphs 1306-1308.

HAS ADOPTED THIS DECISION:

Article 1

The notified operation whereby Deutsche Telekom AG through its indirect wholly owned subsidiary T-Mobile Netherlands Holding B.V. acquires sole control of the entire undertaking Tele2 Netherlands Holding N.V. within the meaning of Article 3(1)(b) of the Merger Regulation is hereby declared compatible with the internal market and the EEA Agreement.

Article 2

This Decision is addressed to:

DEUTSCHE TELEKOM AG

Friedrich-Ebert-Allee 140

53113 Bonn

Germany

Done at Brussels, 27.11.2018

*For the Commission
(Signed)*

*Margrethe VESTAGER
Member of the Commission*

**ANNEX A: THE COMMISSION'S QUANTITATIVE ANALYSIS OF
NON-COORDINATED RETAIL PRICE EFFECTS**

TABLE OF CONTENTS

1.	Introduction.....	4
2.	Theoretical framework: Bertrand-Nash Competition in Differentiated Products.....	4
2.1.	The model of Bertrand-Nash competition in differentiated products	5
2.2.	<i>Measures of merger effects</i>	6
2.2.1.	Gross Upward Pricing Pressure Index (GUPPI)	7
2.2.2.	Compensating Marginal Cost Reduction (CMCR)	7
2.2.3.	Indicative price rises and merger simulation	8
2.3.	Efficiencies.....	9
2.4.	Calibration of demand parameters	10
2.5.	The Notifying Party's criticisms of the Commission's quantitative model	10
3.	Determination of the Inputs for the Quantitative Analysis.....	12
3.1.	Diversion ratios	12
3.1.1.	Diversion ratios from the Commission's Survey.....	18
3.1.2.	Diversion ratios using MNP data	22
3.2.	Proxies for quantities and prices	23
3.2.1.	Gross adds as a quantity measure.....	23
3.2.2.	ARPU as price measure	23
3.3.	Margins	24
3.3.1.	Contribution margins as the most appropriate measure of margins.....	25
3.3.2.	Computation of contribution margins	29
3.3.3.	Computation of incremental margins.....	30
3.4.	Data limitations and adjustments	31
3.5.	Summary of the key inputs	32
4.	Results of the calibrated merger simulation.....	33
4.1.	Baseline scenario of the calibrated merger simulation	33
4.2.	Sensitivity analyses of the calibrated merger simulation.....	35
4.2.1.	Sensitivity analysis using diversion ratios based on the unweighted intensive and extensive survey questions.....	35
4.2.2.	Sensitivity analysis using diversion ratios based on MNP data.....	36
4.2.3.	Sensitivity analysis using diversion ratios based on intensive Survey question.....	37
4.2.4.	Sensitivity analysis considering exclusively respondents who considered alternative providers when last selecting a mobile tariff	38
4.2.5.	Sensitivity analysis based on incremental margins.....	39
4.2.6.	Sensitivity analysis assuming a diversion to the outside good	40

4.2.7.	Sensitivity analysis using NRA costs of 2017	41
4.2.8.	Summary of the quantitative analysis' results	42
5.	The survey and the merger simulation submitted by the Notifying Party	43
5.1.	The Notifying Party's view	43
5.2.	The Commission's assessment.....	44
6.	Conclusion	51
	References	53
	Appendix A: Diversion Ratios based on Intensive survey question	54

1. INTRODUCTION¹

- (1) As discussed in Section 8.3.10.2 of the Decision, the Commission has carried out a quantitative analysis to assess the likely change in non-coordinated retail pricing incentives resulting from the direct elimination of horizontal competition between TMNL and Tele2 NL. This Annex contains the details of this analysis.
- (2) The Commission's quantitative assessment consists of an extension of the methodology used in the Article 6(1)(c) Decision and includes certain limited refinements of the analysis presented in the Statement of Objections in response to the Parties' Response to the Statement of Objections.
- (3) The quantitative analysis is based on a measurement of the key empirical inputs for the analysis of pricing incentives, in particular of the measures for the degree of substitutability between the product propositions by different suppliers available to consumers and of the margins earned by suppliers. As explained in Horizontal Merger Guidelines, the degree of substitutability and margins are two important determinants of the likelihood that the elimination of competition between the merging parties will lead to significant non-coordinated price increases.²
- (4) The price effects presented in the Decision and in this Annex summarise the interaction between the measured degree of substitution and margins. They are point estimates of the non-coordinated effect of the merger on prices using a standard framework of analysis. A number of further sensitivity analyses are also presented to test the robustness of the estimates. The analysis should not be considered as providing a precise estimate of the actual effect of the Transaction on price but rather as one informative indicator on the likelihood of significant non-coordinated price increases as a result of the Transaction.
- (5) This Annex is structured as follows. Section 2 presents the Bertrand-Nash framework and the calibration underlying the analysis. Section 3 introduces and discusses the inputs required for the quantitative analysis. The results of the Commission's analysis are presented in Section 4. Section 5 discusses the quantitative model submitted by the Notifying Party. Finally, Section 6 concludes.

2. THEORETICAL FRAMEWORK: BERTRAND-NASH COMPETITION IN DIFFERENTIATED PRODUCTS

- (6) The Commission's quantitative analysis rests on the standard analytical framework of Bertrand-Nash competition with differentiated products. The framework assumes that firms set price in a non-coordinated fashion in order to maximise their own profits. This estimation approach was also used on other recent cases involving mobile telecommunications services.³

¹ All abbreviations and capitalised terms used in this Annex shall have the same meaning as in the Decision.

² Horizontal Merger Guidelines, paragraph 29.

³ Commission decision of 1 September 2016 in case No M.7758 - *Hutchison 3G Italy / Wind / JV*, Commission decision of 11 May 2016 in case No M.7612 - *Hutchison 3G UK/Telefonica UK*, Commission decision of 2 July 2014 in case No M.7018 - *Telefónica Deutschland/E-Plus*, Commission decision of 28 May 2014 in case No M.6992 - *Hutchison 3G UK/Telefónica Ireland*, Commission decision of 12 December 2012 in case No M.6497 - *Hutchison 3G Austria/Orange Austria*.

- (7) The starting point of the analysis assumes that the pre-merger situation constitutes a Bertrand-Nash equilibrium. As a result of the merger, TMNL's and Tele2 NL's products are brought under common ownership. This eliminates competition between these products and generates incentives for the merged entity to raise prices. Post-merger, the merged entity will take into account the effect on the profitability of all of its tariffs when considering whether to change the price of one of its tariffs. For example, if in the pre-merger situation TMNL increased the price of one of its tariffs, it would lose subscribers. A number of these lost subscribers would go to the Tele2 NL tariffs. After the merger, when the TMNL and Tele2 NL tariffs are jointly controlled, these subscribers would no longer be lost from the point of view of the merged entity. This would give rise to incentives to raise prices to the merged entity. Moreover, the more there is substitution between the TMNL and Tele2 NL tariffs (that is to say the higher the diversion ratio), the stronger the unilateral incentive for the merged entity to raise price. Unilateral price changes by the merged entity will also lead to price reactions by rivals (the so called "feedback effects") so that in the post-merger equilibrium all firms' prices may change.⁴ The overall extent of the price increases will depend on the closeness of competition between the merging parties and on the degree of competition from rivals.
- (8) The Commission's quantitative analysis requires a specific form for the underlying customers' demand and in this case it is assumed that the demand is linear. This assumption is conservative as other forms of demand, such as log-linear demand, would imply a higher predicted price increase.
- (9) The framework used also allows assessing the effect of reductions in marginal costs or increases in quality as a result of the merger on the merged entity's incentives to raise price (provided that such effects can be verified and quantified to the required standard set out in the Horizontal Merger Guidelines).⁵

2.1. The model of Bertrand-Nash competition in differentiated products

- (10) Bertrand-Nash competition in differentiated products is formally modelled as follows. Each firm f is assumed to have a portfolio of products, J_f . The total (variable) profits of firm f are given by the sum of profits for each product in its portfolio:

$$\Pi_f(p) = \sum_{j \in J^f} (p_j - mc_j) q_j(p).$$

- (11) Here, p_j denotes the price of product j , p is the vector with the prices of *all* products by all firms, mc_j is the constant marginal cost of product j , and $q_j(p)$ is the demand of product j which depends on all prices offered.
- (12) The effect of a change in the price of product j that is owned by firm f for given prices of other products is given by the derivative of the firm f 's profit function with respect of the price of product j :

$$\frac{\partial \pi^f(p_j, p_{-j})}{\partial p_j} = q_j(p) + \sum_{j' \in J^f} (p_{j'} - mc_{j'}) \frac{\partial q_{j'}(p)}{\partial p_j},$$

⁴ Horizontal Merger Guidelines, paragraph 24.

⁵ Horizontal Merger Guidelines, Section VII.

- (13) Where p_{-j} is a vector of price of all products other than j . A price increase of product j hence has three effects on profits. First, it directly raises profits, proportional to current demand, $q_j(p)$. Second, it lowers the product's own demand which decreases profits proportional to the current mark-up, $(p_j - mc_j)$. Third, as other products are substitutes, it raises the demand for the other products, including the firm's other products. This rise in the demand of the firm's other products in its portfolio partially compensates for the reduced demand of the firm's product j , and hence it has a positive effect on the firm's profits.
- (14) At profit maximising prices, the positive and negative effects of further price rises by firm f must exactly offset one another. This implies that for each product j belonging to firm f , and for given prices of rivals firms, $\frac{\partial \pi^f(p_j, p_{-j})}{\partial p_j} = 0$. This is the first order condition for p_j to be a profit maximising price given the prices of other products.
- (15) If the first-order conditions hold simultaneously for each product j (across all firms) then the price vector p defines the Bertrand-Nash equilibrium of the overall market. In matrix notation, the first order conditions for the equilibrium can be expressed as:

$$q(p) + \left(\Theta \bullet \nabla(p)' \right) (p - mc) = 0,$$

where $q(p)$ is a $J \times 1$ vector with the demand for each product, $\nabla(p) \equiv \partial q(p) / \partial p'$ is the $J \times J$ Jacobian matrix of first derivatives, and mc the vector of marginal costs. Θ denotes the product ownership matrix, that is, a $J \times J$ matrix, whose element in its row i , column j is equal to 1 if product j and i are supplied by the same firm pre-merger and to 0 otherwise. The symbol \bullet denotes element-by-element multiplication of two matrices of the same size. The ownership matrix is multiplied (element-by-element) with the transpose of the Jacobian matrix to account for the fact that each firm only takes account the effect of a price change on its own products but not that on rival products.

- (16) Inverting this equation yields an expression of the Bertrand-Nash equilibrium price vector:

$$p = mc - \left(\Theta \bullet \nabla(p)' \right)^{-1} q(p). \quad (1)$$

- (17) The first element on the right hand side is the marginal cost component of the equilibrium price, while the second is the markup. The markup depends on the own- and cross-price elasticities of demand. The lower the own-price elasticities and the greater the cross-price elasticities, the greater will be the mark-up over marginal cost.

2.2. Measures of merger effects

- (18) As the merger brings together the products of the merging parties under common ownership. In the model this implies a change in the ownership matrix, with the post-merger ownership matrix Θ^{post} reflecting that post-merger all TMNL and Tele2 NL tariffs are owned and controlled by the merged entity. Elements of this matrix which refer to the interaction between TMNL and Tele2 NL tariffs and which took the value 0 pre-merger are changed to 1.
- (19) This change in ownership implies that the first order conditions for a Bertrand-Nash equilibrium no longer hold for the merged entity's products at the pre-merger price.

Also, it has to be noted that in these merger effect calculations it is assumed that the merged entity keeps all the products of the merging firms (no tariffs or brands are shut down). A post-merger price is calculated for each existing tariff of the merging firms. Consequently, in the tables in the subsequent sections price increase predictions are given separately both for TMNL and Tele2 NL, even if these two firms will no longer exist as separate entities on the Dutch mobile communications services market after the implementation of the Transaction.

2.2.1. Gross Upward Pricing Pressure Index (GUPPI)

- (20) The Gross Upward Pricing Pressure Index (GUPPI) provides a first measure of the extent to which (absent synergies) the merged entity has an incentive to unilaterally raise price.
- (21) The GUPPI is derived from the post-merger first order conditions when evaluated at the pre-merger price. For the GUPPI, the first order conditions are divided by the own price derivative of demand and are also normalised by the price. As at the pre-merger prices, the pre-merger first order condition equals to zero, the GUPPI for the merged entity's product j reduces to the "new" terms in the first order condition (in its diversion ratio formulation):

$$(a) \quad GUPPI_j = \frac{1}{p_j^{pre}} \left(\sum_{i \in J^{otherParty}} (p_i^{pre} - mc_j) DR_{ji} \right), \text{ where}$$

$$(b) \quad DR_{ji} = - \frac{\partial q_i(p^{pre})}{\partial p_j^{pre}} \bigg/ \frac{\partial q_j(p^{pre})}{\partial p_j^{pre}}$$

is the diversion ratio from product j to product j' and where the sum is taken over the set of products which pre-merger belonged to the other merging party.

- (22) To compute the GUPPI one therefore only requires information on the diversion ratios between the merging parties' products, and the merging parties' margins and prices. No information on the demand for products or margins of non-merging firms is required. The computation also requires no assumption on the shape of the demand function as prices change.
- (23) GUPPIs are frequently computed under the assumption of single product firms pre-merger. However, the above formulae can equally be applied to compute GUPPIs for multi-product firms.

2.2.2. Compensating Marginal Cost Reduction (CMCR)

- (24) Alternatively one can ask what level of marginal cost reduction is required for each of the merged entity's products to exactly offset the incentive to raise price. In other words, the question is establishing at what level of marginal costs will the pre-merger price still be a Bertrand-Nash equilibrium post-merger.⁶ This required level of compensating marginal cost can be computed as:

$$mc^{comp} = p^{pre} + \left(\Theta^{post} \bullet \nabla(p^{pre})' \right)^{-1} q(p^{pre}).$$

⁶ See also Werden, G. J., (1996): "A Robust Test for Consumer Welfare Enhancing Mergers Among Sellers of Differentiated Products," *Journal of Industrial Economics*, 44, pages 409-413 [2383].

(25) The compensating marginal cost reduction for product j is then

$$CMCR_j = mc_j - mc_j^{comp} \text{ per subscriber, or}$$

$$CMCR_j^{\%} = \frac{mc_j - mc_j^{comp}}{mc_j} \text{ in percentage terms.}$$

(26) As with the computation of the GUPPI, the CMCR only requires information for the merged entity's products at the pre-merger price and diversion ratios between the merging parties' products. This is because at pre-merger prices the post-merger first order conditions for non-merging firms equate to zero. CMCR also requires no specific assumption on the shape of the demand function as prices change.

(27) Although GUPPIs are sometimes used to approximate required marginal cost efficiencies, CMCRs provide a better indication for the required marginal cost reductions, because they take account of the fact that a marginal cost reduction of product j will, via an increase in the margin of product j , also have a feedback effect on the first order conditions for other products. This effect is ignored in approximations based on GUPPI. As the informational requirements for both approaches are the same, CMCRs are to be preferred as a benchmark for required marginal cost efficiencies.

2.2.3. Indicative price rises and merger simulation

(28) Within this framework the post-merger first order conditions, which takes account of the change in ownership of products induced by the merger (via the post-merger ownership matrix Θ^{post}) can be expressed as:

$$p^{post} = mc^{pre} - \left(\Theta^{post} \bullet \nabla(p^{post})' \right)^{-1} q(p^{post}). \quad (2)$$

(29) The predicted post-merger prices within this framework are the prices which satisfy these post-merger first order conditions.

(30) With linear demand, first order conditions can be inverted to directly provide the post-merger price as a function of marginal costs and demand parameters. In general, however, this is not possible and one must solve p^{post} as the solution to a non-linear system of first order conditions numerically. One strategy to do this is to express the first order equations as in equation (2) and then, starting from an initial guess for the new equilibrium price on the right hand side iterates this equation to update the value p^{post} until convergence is achieved.

2.2.3.1. Indicative price rise

(31) If it is assumed that rivals do not react to post-merger price changes by the merged entity, then this problem reduces to finding post-merger prices for the merged entity's products on the basis of the merged entity's first order conditions post-merger. This approach is often called an Indicative Price Rise (IPR).

(32) The advantage of the approach is that it only requires information on the elements in post-merger first order conditions for the merged entity's products as well as an assumption of the functional form of demand. As the approach assumes there are no reactions from non-merging firms, no information on demand derivatives of rival's products is required.

- (33) This approach focusses on the direct incentive of the merged entity to raise price which results purely from the elimination of competition between the merging firms and assumes that non-merging firms do not adjust their prices.
- (34) As regards the price changes by the merging firms this approach is typically conservative. As non-merging firms, when faced with increased demand due to a price increase by the merged entity, will typically also raise their prices to some extent.⁷ Such price reactions lead to "feedback effects" which increase the incentives for the merged entity to raise price relative to the assumption of no rival reactions.

2.2.3.2. Merger simulation

- (35) A full merger simulation also takes account of price reactions by rival firms. The approach hence allows to analyse the interplay of pricing incentives of all firms in the market (including "feedback effects") and predicts the likely change in price for each firm and for the market overall in the post-merger market equilibrium.
- (36) Technically a merger simulation amounts to finding the post-merger price vector which corresponds to the new post-merger Bertrand-Nash equilibrium for all firms, that is, the price vector which satisfies the above equation (2) for all products of all firms simultaneously.
- (37) In addition to an assumption on the functional form of demand, this approach hence requires information on the elements in the first order equations for all firms' products, not just for the merging firms' products.

2.3. Efficiencies

- (38) The effect of reductions in marginal costs as a result of the merger on the merged entity's incentives to raise price can be accounted for by replacing the marginal cost estimate in the equation (2) with the marginal cost after efficiencies.
- (39) Quality improvements can also be accounted for. However, the appropriate technique depends on the assumption on the functional form of demand. If demand is assumed to be linear (as is done in the analysis performed by the Commission), quality improvements that lead to a shift in the demand curve become equivalent to analysing competition in quality adjusted prices with reduced marginal cost.⁸
- (40) The Commission therefore considers that synergies in the form of demand side efficiencies (quality) and in the form of supply side efficiencies (costs) can in principle be accounted for in the framework adopted. However, in order to be taken into account in the Commission's quantitative assessment, the potential demand side or supply side efficiencies arising from the merger must satisfy the conditions in the Horizontal Merger Guidelines.
- (41) The Commission's assessment of the Notifying Party's efficiency claims is provided in Section 8.5 of the Decision. Since the Commission accepts the Notifying Party's efficiencies claim in relation to the NRA, the Commission's quantitative analysis accounts for a decrease in the (perceived) marginal costs of former Tele2 products the as a consequence of the Transaction as set out in paragraph (169).

⁷ Horizontal Merger Guidelines, paragraph 24.

⁸ Willig, R., (2011): "Unilateral Competitive Effects of Mergers: Upward Pricing Pressure, Product Quality, and Other Extensions", *Review of Industrial Organization*, 39, pages 19-38 [ID: 2381].

2.4. Calibration of demand parameters

(42) Using the model to compute measures of merger effects for a specific transaction requires a quantification of the demand parameters. If measures of diversion ratios and margins and quantities are available for the pre-merger situation, demand parameters can be calibrated following the approach described in this sub-section.

(43) A diversion ratio is a measure of the degree of substitutability between two products. The diversion ratio from product j to i (DR_{ji}) is defined as:

$$DR_{ji} = -\frac{\partial q_i}{\partial p_j} \bigg/ \frac{\partial q_j}{\partial p_j}.$$

(44) It measures the number of customers switching from product j to product i following a price increase of product j expressed as a percentage of customers of product j that would stop purchasing product j following the price increase.

(45) With this definition, the pre-merger first-order condition for product j can be rewritten as:

$$q_j \bigg/ \frac{\partial q_j}{\partial p_j} - \sum_{i \in J^j} (p_i - mc_i) DR_{ji} = 0.$$

(46) Observed diversion ratios, margins and quantities hence imply values of $\partial q_j / \partial p_j$, which then imply values for $\partial q_i / \partial p_j$ via the definition of diversion ratios.

(47) Under the assumption of linear demand, the first derivatives do not change as prices change and it is also straightforward to calculate demand changes and compute price increases either by assuming no price reactions from competitors (UPPs) or by solving the full equilibrium effect which takes account of and predicts price reactions by rivals.

2.5. The Notifying Party's criticisms of the Commission's quantitative model

(48) In its Response to the Statement of Objections, the Notifying Party makes a number of arguments in relation to the theoretical framework used in the Commission's quantitative analysis (i.e. the model).⁹ In addition, the Notifying Party submitted a report prepared by Professor Frank Verboven (the "Verboven report") supporting the Notifying Party's arguments.¹⁰

(49) The Notifying Party criticises that the model focuses on price competition, disregarding other important parameters of competition such as quality, and failing to take into account other factors such as FMC product offerings and product repositioning. The assumption of the model that each provider sells a single representative product is also not realistic, and the static framework of the analysis prevents to correctly take into account the relevant counterfactual scenario post-Transaction.

(50) Moreover, the Notifying Party argues that cost efficiencies, such as a reduction in the variable costs brought about by the Transaction, and demand-side efficiencies, such

⁹ Response to the Statement of Objections, Section 5, page 342.

¹⁰ Frank Verboven, "Evaluating the competitive effects of the merger between T-Mobile and Tele2 in the Netherlands", 6 August 2018.

as the introduction of a new product, are not accounted for in the Commission's quantitative analysis.

- (51) At the outset, the Commission notes that its quantitative analysis uses a rigorous and standard economic framework that is in line with the description of non-coordinated effects of the Horizontal Merger Guidelines. Within this framework, the analysis summarises the complex interplay between measures of the degrees of substitutability and margins (two key indicators of the market competitive conditions) into simple measure of likely price increases.
- (52) The Commission acknowledges that its analysis abstracts from a number of factors. Nevertheless, the applied framework captures, in the Commission's view, the most important factors determining how the Transaction will likely affect the mobile operators' pricing incentives, such as the degree of substitution between the Parties. The assumption whereby each provider sells a single representative product, although being a simplification of the reality, renders the model more tractable and is appropriate for the purpose of predicting the change in the Parties' pricing incentives post-Transaction for their average product. Likewise, bundled offers such as FMC are indirectly taken into account in this framework in the diversion ratios, as they encompass switching between mobile-only tariffs and FMC offers. The same applies to other relevant variables such as prices and margins, for which the mobile component of FMC offers will be averaged together with mobile-only tariffs.
- (53) The framework of the Commission's quantitative analysis is also able to account for quality improvements, provided that they are properly quantified. In any event, the quality improvements claimed by the Notifying Party represent efficiency claims and as such are assessed in Section 8.5 of the Decision. Given that the Transaction does not give rise to a significant impediment to competition on the relevant market(s), it can be left open whether any of these further efficiency claims meet the three cumulative efficiencies criteria. The Commission's quantitative analysis is consistent with that assessment as it takes into account the accepted efficiencies claim related to the elimination of the NRA while it does not take a view on the claimed quality improvements.
- (54) Some aggregation is also standard and necessary for practical purposes in competition cases.¹¹ And the analysis of price effects at the firm level for the overall private segment and for the postpaid private segment allows for sufficient differentiation for the purposes of this case. Moreover, such aggregation does not ignore product characteristics other than price as segment level diversion ratios still reflect switching of consumers between individual products with different characteristics along a multitude of dimensions. Such measures therefore reflect the average constraint between firms taking into account the current product offerings of firms.
- (55) As regards competition from FMC bundles, the Commission notes that both Parties are (predominantly) mobile players. The constraint on the Parties arising from customers' ability to switch to alternative products from other providers (whether mobile only products or FMC bundles) is adequately captured by diversion ratios to such rivals at the firm level.

¹¹ Market shares and concentration indices, for example, aggregate across products in a market. Moreover, it is not possible, in practice, to estimate diversion ratios and analyse the interaction of a large number of products in a market.

- (56) Some of the arguments noted in the Verboven report only apply to the Commission's quantitative analysis as presented in the Article 6(1)(c) Decision. In particular, the Commission acknowledges that, as explained in Section 2.2.3, the IPR analysis in the Article 6(1)(c) Decision focuses on the direct change in pricing incentives for the merging parties. This captures the most direct effect of a merger and typically leads to conservative estimates for the change in price by the merged entity. The analysis in this Annex also accounts for rivals' reactions and allows the computation of average market or segment wide effects.

3. DETERMINATION OF THE INPUTS FOR THE QUANTITATIVE ANALYSIS

- (57) This section presents the details of the inputs necessary to perform the quantitative analysis. The quantification of the likely price effects following the Transaction relies on empirical measures of diversion ratios and margins as well as on observed quantities and prices pre-merger.
- (58) The Commission's computation of the inputs for the analysis relies on two key data sources. First, the quantification of margins, prices and quantities (see Sections 3.2 and 3.3) primarily relies on segment level monthly data on each mobile operator's subscribers, revenues and costs in the respective segments at the retail level provided by MNOs of the Dutch mobile telecommunication market (the Parties, KPN and VodafoneZiggo) as well as by the primary MVNOs (Simpel, Youfone, Lebara, Lycamobile, AH Mobiel and Vectone). The Commission obtained further information regarding the mobile operators' estimates of avoidable operating expenditures (OPEX) and avoidable capital expenditures (CAPEX) in the hypothetical case of a reduction of the subscriber base, which complements the assessment of the margins.
- (59) Second, the computation of diversion ratios relies on a customer survey conducted for the assessment of the transaction as well as on switching information collected from the operators' Mobile Number Portability ("MNP") data (see Section 3.1).
- (60) The construction of the diversion ratios is discussed in Section 3.1 while Section 3.2 presents the measures used as proxies for price and quantities pre-merger. Section 3.3 discusses the computation of margins by the Commission to approximate the operators' economic margins.
- (61) Section 3.4 assesses the Notifying Party's criticisms in relation to the input used in the Commission's quantitative analysis.
- (62) Limitations in some of the data relied upon required some specific adjustments to the general approach with respect to these variables. These adjustments are discussed in Section 3.5.
- (63) Section 3.6 summarises the key inputs used in the subsequent analysis.

3.1. Diversion ratios

- (64) In the retail mobile telecommunication market the diversion ratios among market participants can be computed either at network level, by including the diversion

ratios of the MVNOs to their respective host MNO, or at provider level, by treating the MVNOs as completely independent players on par with MNOs.¹²

- (65) In its Response to the Statement of Objections, the Notifying Party argued that the network level analysis is not relevant because of the limited presence of Tele2 NL in the wholesale market and the fact that MVNOs (e.g. Simpel) compete with their host MNOs (e.g. TMNL) in the retail market.
- (66) In the Commission's view, an analysis based on diversion ratios at the provider level is useful to analyse the effect of the merger at the retail level holding wholesale conditions for MVNOs fixed and treating MVNOs as fully independent at the retail level. Therefore, the analysis at the provider level does not account for any reduction of competition at the wholesale level nor of any change in incentive of the merged entity to serve the wholesale market which would affect the retail market by undermining the effectiveness of the MVNOs. An analysis of at the provider level hence underestimates the anti-competitive non-coordinated effect on the retail market.
- (67) An analysis based on diversion ratios at the network level instead assumes that the effect of the elimination of competition between TMNL and Tele2 NL is best captured by their positions at the network level rather than by the pure retail level interaction between their respective brands. As discussed in Section 8.3.7 of the Decision, the Commission considers that the merged entity may have a decreased incentive to provide wholesale access post-Transaction to its wholesale customer Simpel. Therefore, it is appropriate to reflect this in the Commission's quantitative assessment.
- (68) The Commission considers that the network level analysis proxies to a certain extent these wider anti-competitive effects of the Transaction. This accounts for the structural links present between the host MNO and the hosted MVNOs in terms of financial incentives (e.g. the host MNO re-captures part of the margin lost by the MVNO via wholesale fees), or to take into account possible constraint related to the pricing conduct of the MVNOs. For example, the network level analysis is able to proxy to a certain extent the weakening of the competition between Tele2 NL and the MVNOs on TMNL's network brought about by the Transaction. Indeed, in previous merger cases concerning the mobile telecommunications sector, the Commission has used diversion ratios at the network level in its baseline scenario analysis.¹³
- (69) In any case, the Commission presents in this Annex the results of its quantitative analysis using both network level and provider level diversion ratios, in order to provide a reasonable range for the likely non-coordinated price effects from the Transaction.

¹² For confidentiality reasons, the network level diversion ratios from the TMNL network were based on the port outs of TMNL and excluded port outs of Simpel. Port outs of other minor MVNOs hosted on the Parties' networks were also not included due to data limitation.

(1) ¹³ See, for example, Commission decision of 2 July 2014 in case No M.7018 – *Telefónica Deutschland/E-Plus*.

- (70) Specifically, for the analysis at network level, the diversion ratios of the MVNO Simpel are included in the diversion ratios of TMNL.¹⁴ Tele2 NL has not been very active at the wholesale level, and does not host any significant MVNOs.¹⁵
- (71) In the Article 6(1)(c) Decision, the Commission derived diversion ratios based on MNP data. The Commission considers MNP data to be a reliable source of customer switching behaviour, and used it also in recent merger cases in the mobile telecommunication sector.¹⁶
- (72) However, the use of MNP data for the purpose of the quantitative analysis of non-coordinated effects also has a number of limitations. In particular, the MNP data (i) includes only switching behaviour of customers who ported their mobile phone number; (ii) requires assumptions on either the customers' first or second choice of mobile operator; and (iii) does not necessarily represent the preferences of marginal consumers that would switch following a price increase (which are more relevant for the purpose of the analysis).¹⁷ These shortcomings were noted by the Notifying Parties in previous merger cases in the mobile telecommunication sector,¹⁸ and were also mentioned by the Notifying Party in the Form CO and in its Article 6(1)(c) Response as well as in the Verboven report in the present case.
- (73) The Commission considers it a priori unclear whether these shortcomings bias the diversion ratios and, if so, in what direction. The extent of the bias, if any, may also depend on the particular case. While the Commission acknowledges that MNP based diversion ratios are based on switching for a (possibly) multitude of reasons and may confound the effect a different changes in prices or characteristics, the Commission considers that the degree of observed customer switching between two firms is still a reasonable indicator for the degree of competitive interaction between these firms. Absent an alternative source of information that addresses the limitations of MNP data, the Commission therefore considers that MNP data are a reasonable basis to measure diversion ratios for its quantitative assessment.
- (74) Nevertheless, in the present case, the Commission investigated during the phase II investigation whether the above limitations of the MNP data lead to inaccuracies in the measurement of diversion ratios. To this end, the Commission, with the collaboration of the Dutch Authority for Consumers & Markets ("ACM"), conducted a customer survey among mobile phone subscribers in the Netherlands (the "Survey").¹⁹ The Survey was designed to investigate the question of closeness of competition as described in the Horizontal Merger Guidelines, that is, in terms of

¹⁴ Diversion ratios of other minor MVNOs hosted on TMNL's network were not included due to data limitation. This concerns the following MVNOs: Solcon, Stipte, 88 Mobile, Choozze, Limesco, SpeakUp.

¹⁵ Diversion ratios of minor MVNO *blijf were not included due to data limitation.

¹⁶ See Commission decision of 1 September 2016 in case No M.7758 - *Hutchison 3G Italy / Wind / JV*, Commission decision of 11 May 2016 in case No M.7612 - *Hutchison 3G UK/Telefonica UK*, Commission decision of 2 July 2014 in case No M.7018 - *Telefónica Deutschland/E-Plus*, Commission decision of 28 May 2014 in case No M.6992 - *Hutchison 3G UK/Telefónica Ireland*.

¹⁷ Being representative of all past switching events (in which customers ported their number), the MNP data does not necessarily represent the preferences of those consumers who would switch operator in the event of an increase in price (that is, the marginal consumers).

¹⁸ See, for example, Commission decision of 28 May 2014 in case No M.6992 - *Hutchison 3G UK/Telefónica Ireland*.

¹⁹ See Annex B to the Decision, containing the Survey report. Prior to implementing the Survey, the Notifying Party has been given the opportunity to comment on the survey's questionnaire.

customers' first and second choices,²⁰ and to identify such preferences for the marginal consumers.

- (75) The Survey targeted customers of the Parties who recently made a switching decision to either change provider to one of the Parties ("gross adds"), or modify/renew their contract with one of the Parties ("internal switchers").²¹
- (76) The Survey focused on customers of TMNL and Tele2 NL as the degree of substitutability between the Parties' products is the main driver of the change of pricing incentives arising from the elimination of competition between the Parties through the Transaction. Furthermore, the Survey was extended to customers of Simpel, a large MVNO hosted by TMNL, in order to refine TMNL's network level diversion ratios. Non-coordinated incentives for post-merger price increases can arise because customers that following a price increase by one merging party would have been lost to the other merging party in the absence of the merger are no longer lost for the merged entity post-merger. The degree of substitutability between the Parties' products is a key determinant of the strength of this most direct loss of competition effect of a merger.²²
- (77) Targeting the Survey to customers of TMNL, Tele 2 NL and Simpel aims to obtain, for a given Survey size and design, the best possible information on diversion ratios between the merging parties. This is justified as the degree of competition between the merging parties is of primary importance in determining the extent of likely non-coordinated effects. In contrast, while the degree of substitutability with products of non-merging firms affects the extent of reactions of competitors to price increases by the merged entity which are also taken into account in the quantitative analysis, the precise measurement of such feedback effects is only of secondary importance for the price predictions of the model. For this reason, the Commission relies on MNP data for to estimate diversion ratios of the competitors (KPN, VodafoneZiggo, and the MVNOs).²³
- (78) The Survey focused on respondents who had chosen a new tariff plan (or renewed the tariff plan) within the most recent 6 months available, that is, between November 2017 and April 2018.²⁴ Furthermore, the Survey screened the respondents with a number of questions. The Survey proceeded only if (i) the phone number called was the respondent's primary personal mobile phone tariff plan, and (ii) the respondent had chosen/modified the tariff personally.
- (79) Customers who recently made a switching decision (to one of the Parties, or within one of the Parties) revealed the operator they switched to (or with which they chose to remain) as their first choice alternative. Hence, the Survey

²⁰ See Horizontal Merger Guidelines, paragraph 28.

²¹ The Survey was conducted using CATI (Computer Assisted Telephone Interviews) and has been designed and implemented in cooperation with the specialised survey agency Panteia. The Commission has obtained from TMNL, Tele2 NL and Simpel data on mobile phone numbers of a sample of gross adds and internal switchers in the prepaid and postpaid private segments over the period between November 2017 and April 2018. The Survey interviewed a sub-sample of those customers who made a switching decision in the same period.

²² Horizontal Merger Guidelines, paragraphs 24 and 28.

²³ For these reasons, the Commission disagrees with the argument in the Verboven report that the Survey's focus on customers of the merging parties would present a shortcoming of the Survey.

²⁴ Due to Tele2 NL's small presence in the prepaid segment, in order to obtain a sufficiently large sample size, the period was extended to March 2017 for gross adds and December 2016 for internal switchers.

ensured that the customers interviewed had as their first choice one of the Parties. The Survey then investigated these customers' second choice with two questions.

- (80) The first question investigated the respondents' switching behaviour in the hypothetical event that the tariffs of their most recently chosen provider (i.e. their first choice) had been 10% more expensive at the time they made their choice ("intensive question").²⁵ The second question investigated the respondents' switching behaviour in the hypothetical event that their most recently chosen provider had not been available at the time they made their choice ("extensive question").
- (81) Both questions elicit information on the distribution of respondents' (actual) second choices at the time they made their first choice. That is, the questions are informative on what mobile operator offered the second best alternative to each the respondent among all the options actually available to the respondent at the time he last chose his first best mobile operator. Furthermore, the intensive question is able to identify the second choices of the marginal consumers, i.e. of those that are most likely to change their behaviour following a price increase. In contrast, the extensive question provides information of the distribution of second-best choices of average consumers including those that would likely not change their behaviour following a 10% price increase.
- (82) The Commission considers that the ability of the Survey to disentangle customers' first and second choices captures the essence of closeness of competition as it is described in the Horizontal Merger Guidelines, and its ability to provide insights on the preference of the marginal consumers is valuable for the purpose of the quantitative analysis. Moreover, the Survey is not dependent upon other costumers' choices unrelated to closeness of competition (e.g. to port their number).
- (83) In its Response to the Statement of Objections, the Notifying Party made a number of arguments in relation to the Commission Survey, which are summarized as follows.
- (84) First, the Survey asks a hypothetical question to which customers would likely have difficulties to answer to either because they do not have the full set of information or because they do not recall the moment they made the switching decision.
- (85) Second, the Survey sample is non-representative as the Survey does not interview the customers of the Parties' competitors.
- (86) Third, the sample of Survey responses underlying the computation of the diversion ratios is too small, and therefore the diversion ratios are likely unreliable.

²⁵

The consumers were asked about their most recent choice of mobile telephone brand and which brand they would have chosen in case the price of the chosen brand had been approximately 10% higher per month at the time they made their choice. Note that the Survey presented an actual value to the customers, based on the monthly spending reported by the interviewee. See Annex B for the Survey Report which also contains the survey questionnaire.

- (87) Furthermore, the Verboven report considers that the Survey questionnaire suffers from a number of shortcomings that make the obtained results unreliable. First, the report argues that by asking consumers only for the brand of their second choice alternative, respondents are likely to ignore that operators will differ in important product attributes such as data allowances, which would lead to biases in diversion ratios. Second, the Survey design is not efficient and does not allow a consumer estimation of valuations for individual product attributes. Third, the report argues that the intensive question would be leading and induce customers to put a too high emphasis on price thereby biasing results.
- (88) Finally, the Notifying Party criticises that the diversion ratios used in the Commission's analysis are the combination of diversion ratios based on Survey data and diversion ratios based on MNP data. According to the Notifying Party, the Commission should have interviewed also each of the competitors' customers. Because it has not done so, the claim whereby the feedback effect from non-surveyed providers is of secondary importance for the price predictions is unsubstantiated. Moreover, the Notifying Party argues that, due to the limitations also highlighted by the Commission, MNP data are not a reliable source of information for the computation of the diversion ratio.
- (89) In relation to the Notifying Party's criticisms, the Commission makes the following considerations.
- (90) First, the Survey was designed to avoid or minimize any potential bias stemming from the hypothetical nature of the question or from difficulties in the customers' recollection. The Survey included several screening questions to ensure that number called was the primary personal mobile phone tariff of the customer, and that the respondent had chosen or modified the tariff personally. Another question investigated whether the customer actively looked for tariffs of other providers at the time of the switching decision. The Survey questions were also designed to help the interviewee recall the context of the last choice and the elements that drove that decision. For example, one question made the interviewee recall the tariff features he considered important at the time of the switching. Another question made the interviewee recall where the switching decision took place. In the Commission's view such measures avoided or minimized the interviewees' responses to be affected by the biases claimed by the Notifying Party.
- (91) Second, the Survey was not designed to be representative of the entire Dutch population (or of the Dutch population with mobile phones). Rather, the Survey was effectively designed to be representative of the Parties' customer bases. Therefore, the Notifying Party's criticism is misplaced.
- (92) Third, while the Commission considers that the number of respondents on the intensive Survey question is sufficient for TMNL's and Tele2's customers to reliably compute the diversion ratios, the number of respondents for Simpel may be insufficient. This may negatively impact the reliability of the diversion ratios. For this reason, in the baseline scenario the Commission uses the

diversion ratios based on the intensive and extensive Survey questions, which count a higher number of respondents.²⁶

- (93) Furthermore, while the Commission acknowledges that respondents may overstate their reaction to hypothetical price increases²⁷, the responses to the Survey questions are not used to quantify demand elasticities. The sole purpose of the Survey is to obtain the information of the distribution of the provider of respondents' actual second choice alternatives within the market. There is no indication that potential overstatement of price reactions would lead to biases in this distribution. Similarly, the Commission does not consider that asking consumers for the provider of their actual second choice alternative at the time they made their last choice would induce respondents to ignore the product characteristics of the alternatives among they had available. Finally, the Survey's purpose is not to estimate consumer valuations of individual product attributes by efficiently designing, and presenting respondents with, different hypothetical alternative products that may not have any counterpart in the market. Criticisms to this effect therefore miss the point of the Survey.
- (94) Finally, the Notifying Party misrepresented the explanations provided by the Commission in relation to relying on MNP diversion ratios for competitors. The fact that the overall predicted price effects do not materially depend on diversions of competitors so that the latter are of secondary importance, as noted in paragraph (82), does not depend on the actual size of the competitors' diversion ratios. It is a general feature of the model, whereby the element of primary importance for the average price effects is the degree of substitutability between the Parties.²⁸ Moreover, notwithstanding its limitations the Commission considers MNP data as a valuable source of information for the computation of the diversion ratios.
- (95) Overall, therefore, the Commission views the Survey as a superior source of information for the purpose of assessing closeness of competition, compared to other sources based on past switching behaviour, such as the MNP data.

3.1.1. Diversion ratios from the Commission's Survey

- (96) The Survey targeted a total of 2 500 respondents in the private segment who had changed their mobile provider (the "gross adds"²⁹) or modified/renewed their tariff plan (the "internal switchers") between November 2017 and April 2018 (that is, during the most recent 6 months for which data is available).³⁰ The Survey was stratified as follows. It was designed to obtain 1 000 respondents from both TMNL and Tele2 NL as well as 500 respondents from

²⁶ In the Statement of Objections, the Commission used the diversion ratios based on the intensive Survey question in its baseline scenario.

²⁷ E.g. more respondents to the intensive question might indicate that they would switch away from the merged entity following a 10% price increase than would actually switch.

²⁸ The insensitivity of the predicted price effects to changes of the diversion ratios of competitors can be directly seen when perturbing the diversions of competitors.

²⁹ Note that gross adds in this context include individuals who had switched mobile operators, as well as individuals who had acquired their first mobile connection.

³⁰ Due to Tele2 NL's small presence in the prepaid segment, in order to obtain a sufficiently large sample size, the period was extended to March 2017 for gross adds and December 2016 for internal switchers.

Simpel.³¹ For TMNL and Tele2 NL, 700 responses of postpaid customers and 300 responses of prepaid customers were collected. Simpel is only active in the postpaid segment.³²

- (97) The Survey did not target business customers due to the fact that business customers are likely not in control of their tariff plans decisions and are likely not to pay directly for their tariff plans. In addition, the business segment is not at the focus of the Commission's investigation in the present case. In the business segment, the Parties had a combined market share of [...] % by subscribers ([...] % by revenues) in 2017. This means that the business segment would not be affected individually in view of the Parties' limited combined share. The focus of the Commission's competitive assessment lies on the market segment for the retail provision of mobile telecommunication services to private customers in the Netherlands. This is also reflected in the Commission's quantitative assessment. If the business segment were to be included in the analysis, in light of the Parties' limited combined share, it is likely that the predicted price effects would be lower in the relevant overall market.
- (98) With regard to TMNL's prepaid customers, a large number of respondents indicated that they had a postpaid subscription. It was also established that the replies of these customers were in fact very similar to those given by TMNL's postpaid customers. Therefore, these respondents were excluded from the Survey results, leading to slightly less than 300 responses for TMNL in the prepaid segment.³³
- (99) The Commission decided to let the division in gross adds and internal switchers fall naturally without placing any quotas for the Parties. For TMNL and Simpel, the ratio between gross adds and internal switchers was broadly in line with the distribution in the overall population. In the case of Tele2 NL, targeted interviews were conducted to increase the number of gross adds in the sample. Likewise, the division according to some demographic characteristics of the population (gender, age, region of residence) also fell naturally.
- (100) Moreover, in calculating the diversion ratios based on the Survey data, the Commission assumed that switching takes place within the same segment. In the Commission's view, excluding the cross segment switchers would imply an unnecessary loss of information. This approach is also consistent with the one followed in the computation of the diversion ratios based on MNP data.³⁴
- (101) The Commission has computed two sets of diversion ratios from the responses to the Survey. The first set of diversion ratios is based on the responses to the

³¹ The final Survey obtained 1 001 responses from Tele2 NL's customers, 990 responses from TMNL's customers, and 501 responses from Simpel's customers.

³² Besides gross adds, Simpel provided a sample of "renewals" and "switchers" which both correspond to the Commission's definition of internal switchers.

³³ In addition, in context of RFI 50 on customer demographics, TMNL indicated that the provided sample of internal prepaid switchers only contained switchers from postpaid to prepaid tariffs.

³⁴ See Section 3.1.2.

intensive question only. The second set of diversion ratios is based on an aggregation of the responses to the intensive and to the extensive question.³⁵

- (102) Table 1 and Table 2 display the number of respondents to the intensive survey question and to the intensive and extensive survey questions, respectively, by operator-segment combination.³⁶ About 40% of the interviewees declared that they would switch operator following a price increase; a number that increases to almost the full sample by including also the responses to the extensive question.³⁷

Table 1: Number of respondents to the intensive survey question

Operator\Segment	Postpaid Private	Overall Private
TMNL	268	345
TELE2	359	457
SIMPEL	162	162

Table 2: Number of respondents to the intensive and extensive survey questions

Operator\Segment	Postpaid Private	Overall Private
TMNL	667	934
TELE2	689	973
SIMPEL	493	493

- (103) The sub-sample used to compute the diversion ratios was further re-weighted to reflect the actual distribution of the customer populations of the three operators from which the sample was drawn. The weighting was carried out based on the combination of the following variables: switch type (gross add or internal switcher), segment (postpaid private or prepaid private), gender (male or female), and age group (six age cohorts).
- (104) For a given operator j (TMNL, Tele2 NL, and Simpel), each survey cohort of answers i (each combination of the demographic and non-demographic variables) used for the computation of the diversion ratios has been weighted using the ratio between the proportion of i in the population (P_{ij}^{pop} , obtained by the operators), and the proportion of i in the survey's sample (P_{ij}^{sample}).

$$weight_{ij} = \frac{P_{ij}^{pop}}{P_{ij}^{sample}}$$

³⁵ Note that the extensive question was asked only to those respondents who did not provide a switching preference to the intensive question. The two sets of responses do not therefore overlap.

³⁶ For Simpel, all customers are classified as postpaid private customer. Therefore, the number of respondents in the postpaid private and in the overall private segments is the same.

³⁷ The figures refer only to the switching questions. A sizeable number of customers, however, could not identify the operator they would switch to, and are therefore excluded from the computation of the diversion ratios.

- (105) Table 3 and Table 4 show the diversion ratios based on the Survey intensive and extensive questions at network and provider level, respectively. The tables are divided by segments: postpaid private and overall private. The Commission uses the diversion ratios based on the intensive and extensive Survey questions in the baseline scenario of its quantitative assessment.

Table 3: Diversion ratios based on intensive and extensive Survey questions, network level

Overall Private	TMNL	TELE2	KPN	VODAFONE
TMNL	-	[10-20]%	[40-50]%	[40-50]%
TELE2	[40-50]%	-	[30-40]%	[20-30]%
Postpaid Private	TMNL	TELE2	KPN	VODAFONE
TMNL	-	[10-20]%	[40-50]%	[40-50]%
TELE2	[40-50]%	-	[30-40]%	[20-30]%

Table 4: Diversion ratios based on intensive and extensive Survey questions, provider level³⁸

Overall Private	TMNL	TELE2	SIMPEL	KPN	VODAFONE	OTHER
TMNL	-	[10-20]%	[5-10]%	[30-40]%	[40-50]%	[0-5]%
TELE2	[30-40]%	-	[5-10]%	[30-40]%	[20-30]%	[0-5]%
SIMPEL	[20-30]%	[10-20]%	-	[30-40]%	[10-20]%	[10-20]%
Postpaid Private	TMNL	TELE2	SIMPEL	KPN	VODAFONE	OTHER
TMNL	-	[10-20]%	[5-10]%	[30-40]%	[40-50]%	[0-5]%
TELE2	[30-40]%	-	[10-20]%	[20-30]%	[20-30]%	[0-5]%
SIMPEL	[20-30]%	[10-20]%	-	[30-40]%	[10-20]%	[10-20]%

- (106) Appendix A of this Annex presents the diversion ratios tables based on the intensive Survey question, and Section 4.2.3 presents the results of a sensitivity analysis that estimates the price effects of the merger using that set of diversion ratios.
- (107) In its Response to the Statement of Objections, the Notifying Party submits that the diversion ratios used in the Commission's baseline scenario do not include any diversion to the outside good, which is an unrealistic assumption.
- (108) In this regard, the Commission notes that the assumption of no diversion to the outside good in the baseline scenario is in line with the Commission's precedents.³⁹ The Commission has no information on which it could base an estimate of the diversion to the outside good or the level of the aggregate elasticity. It appears likely, however, that the aggregate elasticity in the mobile

³⁸ Diversion ratios to operator "Other" include MVNOs that are included in the analysis (such as Lebara or Lycamobile), as well as smaller MVNOs that are not included in the analysis.

³⁹ See M.7758 - *Hutchison 3G Italy / Wind / JV*, and M.7612 - *Hutchison 3G UK/Telefonica UK*.

telecom sector is low, and that a 10% diversion to the outside good, as assumed in a sensitivity analysis, already overstates the reduction in subscribers or usage in response to a price increase.

3.1.2. Diversion ratios using MNP data

- (109) The Commission has also computed the diversion ratios based on MNP data for all firms in the market. This measure of diversion ratios is calculated from information on port out requests in each mobile operator's MNP database, which represent the number of porting requests an operator receives from other operators relating to customers who want to port their number to the other operator.
- (110) The diversion ratio from segment z of firm j to firm i is then computed as the number of port out requests received by firm j from firm i relating to segment z divided by the total number of port out requests received by firm j relating to segment z .
- (111) The MNP data provided by the mobile operators contained information on the segment of origin but not on the segment of destination. The Commission has assumed that for each port out the segment of destination is the same as the segment of origin.
- (112) Table 5 and Table 6 display the diversion ratios of the Parties computed using MNP data (the "MNP diversion ratios").⁴⁰

Table 5: Diversion ratios based on MNP data, 2017, network level⁴¹

Overall Private	TMNL	TELE2	KPN	VODAFONE
TMNL	-	[...]	[...]	[...]
TELE2	[...]	-	[...]	[...]
Postpaid Private	TMNL	TELE2	KPN	VODAFONE
TMNL	-	[...]	[...]	[...]
TELE2	[...]	-	[...]	[...]

Table 6: Diversion ratios based on MNP data, 2017, provider level

Overall Private	TMNL	TELE2	SIMPEL	KPN	VODAFONE	OTHER
TMNL	-	[...]	[...]	[...]	[...]	[...]
TELE2	[...]	-	[...]	[...]	[...]	[...]
Postpaid Private	TMNL	TELE2	SIMPEL	KPN	VODAFONE	OTHER
TMNL	-	[...]	[...]	[...]	[...]	[...]
TELE2	[...]	-	[...]	[...]	[...]	[...]

⁴⁰ The Notifying Party will have access to the full MNP diversion ratios table, including the diversion ratios of the other market participants, in the Data Room.

⁴¹ The diversion ratios of TMNL at network level are provided in ranges as they include the confidential MNP data of Simpel.

- (113) Compared to the diversion ratios based on the survey intensive question discussed in Section 3.1.1, the MNP diversion ratios generally display a higher diversion from TMNL to Tele2 NL, as well as a higher diversion from Tele2 NL to TMNL.

3.2. Proxies for quantities and prices

3.2.1. Gross adds as a quantity measure

- (114) The Commission's approach is intended to capture competition for customers which are contestable in the sense that they are in a position and willing to consider moving to a different provider.
- (115) To proxy for these customers, the Commission used the number of customers gained by each mobile operator in the private segments (the gross additions or gross adds).⁴²
- (116) Concerning the Notifying Party's argument that it would be more appropriate to rely on subscriber market than on gross adds, the Commission notes that the use of the gross-adds as a proxy for the contestable subscribers is in line with the Commission's precedents.⁴³ Moreover, the definition of gross-add is well-known and common in the industry, and the number of gross-adds is a metric recorded consistently by all operators. In contrast, the concept of "contestable subscriber" is not commonly used in the industry and therefore not properly recorded.⁴⁴
- (117) Furthermore, in its Response to the Statement of Objections the Notifying Party contends that the use of 2017 data is problematic, as it does not take into account the latest market developments of 2018 such as the increase competitive pressure exerted by Simpel. In this regard, the Commission notes that inputs based on accounting data refer to the latest full calendar year (i.e. 2017). This is a standard practice to avoid distortions due to seasonality and/or accounting practices.

3.2.2. ARPU as price measure

- (118) The Commission has used the average revenue per user ("ARPU") as the relevant proxy for prices.
- (119) ARPU proxies the average monthly expenditure of an average customer of the mobile operators. It is hence the appropriate basis to compute percentage increases of the prices paid by consumers.
- (120) The use of ARPU implies that usage is assumed to be exogenous⁴⁵ and that customers choose between brands, i.e. that the customer chooses the provider with the most convenient offer given his or her exogenous needs. In the Commission's view, it is appropriate to work with this simplifying assumption,

⁴² See also paragraphs [242] to [244] of the Statement of Objections.

⁴³ See M.7758 - *Hutchison 3G Italy / Wind / JV*, and M.7612 – *Hutchison 3G UK/Telefonica UK*.

⁴⁴ The Commission further notes that the Notifying Party, despite having access to the complete set of data used in the quantitative analysis through the data room procedure, did not attempt any computation of the contestable subscribers.

⁴⁵ This implies that usage needs are given, that is that they are not a function of pricing.

as consumption is taking place more and more within the bundle due to the large and increasing bundle sizes.⁴⁶

- (121) Specifically, ARPU has been calculated by dividing total revenues from subscribers (including airtime revenues (voice, SMS, data, value-added services), handset revenues but excluding revenues from mobile termination as they are unrelated to the customers' payments) by the average number of active subscribers over the period.
- (122) The Commission notes, however, that this price measure is upward biased, as the total handset revenues include the upfront payments at the time of purchase. The upfront payment should, instead, be excluded from the monthly expenditure, and be included only in the computation of the margins. Due to data limitation the Commission has not changed its computation of the price measure, and the upfront payment is still conservatively fully allocated in the monthly ARPU. Moreover, as explained in Section 3.4 , [...]. Lastly, the Commission notes that both TMNL and Tele2 NL have a growing customer base, which further increases the relative importance of handset revenues. The Commission notes, however, that the upward bias in the price measures implies a downward bias in the predicted price effects. Hence, the analysis can be considered conservative.

3.3. Margins

- (123) The operators' margins, together with the diversion ratios, represent the two primary sources driving the results of the Commission's quantitative analysis. The determination of the relevant margin figure in the operators' pricing decisions is therefore essential for the analysis.
- (124) The Commission requested information from the operators on their costs that naturally vary with the number of subscribers (e.g. airtime costs, subscriber acquisition costs, etc.). Subtracting this cost category (the "contribution costs") from the relevant revenue figure forms the "contribution margins".
- (125) The Commission also requested the operators to provide their estimate on the amount of the costs not directly related to the number of subscribers (i.e. OPEX and CAPEX figures) that could be avoided should the subscriber base decrease. Subtracting this cost category (the "incremental costs") from the contribution margins forms the "incremental margins".
- (126) For the purposes of the merger simulation analysis, the Commission is primarily interested in the margin measure that best reflects marginal costs, that is, those costs that are usually taken into account by firms when setting prices.
- (127) The Commission considers that the contribution margins constitute the most appropriate approximation for the economic margins driving the pricing decisions of each mobile operator. Not only are contribution margins directly associated with subscribers, there is also ample evidence indicating that they are the primary driver of the operators' pricing decisions. Moreover, there is

⁴⁶ The Commission computes a yearly average ARPU figure. Usage needs over a period of one year can be reasonably expected not to change as significantly as to be not represented by the yearly average ARPU anymore.

evidence indicating that the incremental costs are not taken into account in the operators' pricing decisions.

- (128) The following subsections first describe the reasons whereby the Commission considers contribution margins the appropriate margin for the analysis. Then, they describe the Commission's computation of the margin figures.

3.3.1. Contribution margins as the most appropriate measure of margins

- (129) Contribution margins are based on direct variable costs only, that is, those costs that naturally vary in direct proportion to each customer acquired or lost. They represent, therefore, the primary candidate to be used as a proxy of the economic margins.
- (130) To the contrary, incremental margins include a proportion of indirect costs and the extent to which these costs vary with subscriber numbers is prima facie less intuitive. Indeed, there are a number of elements suggesting that incremental margins are less relevant in the operators' pricing decision, if at all.
- (131) In its Response to the Article 6(1)(c) Decision, the Notifying Party argued that contribution margins do not take into account a significant amount of network operators' costs that are variable from an economic perspective, such as CAPEX that operators have to spend in order to expand the capacity of their network. The Verboven report agrees with the Notifying Party's critique of the Commission's use of contribution margins. However, the Notifying Party has failed to explain and to provide evidence that such costs are taken into account in mobile operators' pricing decisions.
- (132) The Commission assessed the Parties' pricing decisions based on evidence from the Parties' internal documents.
- (133) In TMNL's internal documents, [...]:⁴⁷
- (a) [...];
 - (b) [...].
- (134) [...].
- (135) [...]:

Figure 1: [...]

Source: [...].

- (136) [...]

Figure 2: [...]

Source: [...].

Figure 3: [...]

⁴⁷ See TMNL internal documents, [...].

Source: [...]

(137) [...]

Figure 4: [...]

Source: [...]

(138) The Commission notes that while CM1 takes into account fewer cost components than the contribution margin used by the Commission, CM2 appears to be very similar to the contribution margins used by the Commission, as it includes the same cost components, i.e. variable costs and direct sales costs.

(139) This is also confirmed when comparing the contribution margin computed by the Commission with TMNL's CM1 and CM2 in percentage terms. [...]. The Commission notes that a direct comparison is not possible as the Commission's contribution margin includes termination revenues as positive cost, which increases the contribution margin in percentage terms. Furthermore, the Commission's data does not distinguish between the TMNL and Ben brands. Moreover, there may be other small differences in considered revenues and costs. However, overall, the Commission concludes that the contribution margin used by the Commission (i) takes into account similar cost components and (ii) leads to a comparable margins in percentage terms as TMNL's CM2.

Table 7: TMNL Margin Comparison, 2017

	Commission's contribution margin	TMNL CM1	TMNL CM2
Private	[...]	[...]	[...]
Private postpaid	[...]	[...]	[...]
Ben brand	[...]	[...]	[...]

Source: TMNL [...].

(140) TMNL's internal documents [...]

(141) Several presentations [...]

Figure 5: [...]

[...]

Source: [...].

(142) [...]

Figure 6: [...]

[...]

Source: TMNL internal documents, [...].

(143) [...].

Figure 7: [...]

[...]

Source: [...].

(144) Figure 8 [...]⁴⁸

Figure 8: [...]

[...]

Source: [...].

(145) Similarly, Figure 9 [...].⁴⁹

Figure 9: [...]

[...]

Source: [...].

(146) Lastly, [...]

Figure 10: [...]

[...]

Source: [...]

(147) Overall, these examples show that [...].

(148) The Commission considers that [...].

(149) In Tele2 NL's internal documents, [...]:⁵⁰

(a) [...].

(b) [...].

(150) In comparison, [...]. Indeed, in an evaluation of Tele2 NL's [...].⁵¹ In addition, [...].

(151) The following Figure 11 and Figure 12 illustrate [...]⁵²). The first slide summarizes the indicators introduced above: [...]. The second slide further illustrates the calculation of the [...]. It can be seen that [...]

Figure 11: [...]

[...]

Source: [...].

Figure 12: [...]

[...]

Source: [...]

(152) [...].

⁴⁸ See TMNL internal documents, [...].

⁴⁹ See TMNL internal documents, [...].

⁵⁰ See e.g. Tele2 NL internal documents, [...] [ID: 1085-67583; Filename: T2_00247582.pptx].

⁵¹ See TMNL internal document, [...] [ID: 1487-23953; Filename: TMNL-EC-181138.pdf].

⁵² [...]

(153) [...].

(154) [...].⁵³

(155) [...].

(156) [...].

Figure 13: [...]

[...]

Source: [...].

Figure 14: [...]

[...]

Source: [...].

(157) [...].

Figure 15: [...]

[...]

Source: [...].

(158) [...].

(159) [...].

Figure 16: [...]

[...]

Source: [...].

Figure 17: [...]

[...]

Source: [...].

(160) [...].

(161) In any event, the Commission also performed an additional sensitivity analysis by including in the quantitative analysis the long-run incremental margins calculated based on the Parties' submitted avoidable costs. This sensitivity analysis is discussed in Section 4.2.5.

(162) In its Response to the Statement of Objections the Notifying Party points out that the Commission's analysis erroneously uses short-term variable costs (i.e. contribution costs) for the computation of the margins, while long-run incremental costs should be used instead.⁵⁴

⁵³ [...]

⁵⁴ The Notifying Party further argues that the use of incremental margins is also supported by the own price elasticity estimates found in the economic literature. The Commission notes that the only study mentioned by the Notifying Party refers to a different market, and to a period of more than ten years in the past. As such, the Commission cannot consider such evidence to bear any probative value for the current investigation.

- (163) The Commission considers the contribution margins are the relevant margin figures for the assessment of the likely pricing incentives of the Parties primarily because costs not included in the contribution margin appear to play at most a secondary role for pricing decisions of the Parties and the Notifying Party has not put forward any argument to rebut that assessment.
- (164) The Commission's quantitative analysis took the latest market developments into account as much as possible. As explained in footnote 21, the Survey is based on a sample of customers who made a switching Decision between November 2017 and April 2018 (i.e. the latest available period at the time when the data were gathered).

3.3.2. *Computation of contribution margins*

- (165) Contribution margins are calculated by subtracting from the ARPU per operator and segment the following costs per user: interconnection costs, outbound roaming costs (national and international), payments to content providers, bad debt (such as non-retrievable customer debt), customer acquisition and retention costs, handset costs, and other direct costs as reported by the operators. Revenues relating to mobile termination are not included in the ARPU but are included as a negative cost in the calculation of margins.
- (166) Furthermore, for the analysis at network level, the Commission included retail revenues and costs as well as wholesale revenues and costs that accrue in relation to the hosted MVNOs.⁵⁵
- (167) Already today, it is certain that Tele2 NL's costs under its national roaming agreement ("NRA") with TMNL, which amounted to EUR [...] (or about EUR [...] per subscriber) in 2017, are set to [...].⁵⁶ Based on data submitted by Tele2 NL, the Commission computed the implied evolution of Tele2 NL's NRA costs subscribers. Table 8 shows the forecasted average NRA costs per subscriber that the Commission is relying on.⁵⁷

⁵⁵ This results in lower (absolute) margins at network level compared to provider level, as margins at the wholesale level are generally lower than the margins at retail level.

⁵⁶ See Form CO, paragraph 1189.

⁵⁷ To estimate future NRA costs, the Commission has requested TMNL and Tele2 NL to provide their latest forecasts on the evolution of NRA traffic volumes. The Commission's assessment of the provided data is set out in Section 8.4.5 of the Statement of Objections on efficiencies.

Table 8: Forecasted NRA costs per subscriber

Year	Average EUR/subscriber
2017 (actual)	[...]
2018	[...]
2019	[...]
2020	[...]
2021	[...]

Source: Commission computation based on reply by Tele2 NL to RFI 74.

- (168) Because of the [...] of NRA costs between 2017 and 2018 the Commission in its baseline scenario adjusted Tele2 NL's pre-Transaction contribution margin by relying on 2018 instead of 2017 NRA costs. The adjustment of Tele2 NL's contribution margin is carried out because [...].⁵⁸ Therefore, the Commission considers that the upward pricing pressure from the loss of competition can be more accurately assessed by relying on the 2018 NRA cost estimate instead of the 2017 NRA costs. In a sensitivity scenario, the Commission furthermore also computes the price effects when relying entirely on Tele2 NL's 2017 costs, including for NRA costs.
- (169) Furthermore the Commission takes into account pro-competitive effects stemming from the elimination of the NRA due to the Transaction. In line with the Commission's general approach to cost efficiencies (see Section 2.3), the Commission assumes that post-Transaction, variable NRA costs of Tele2's products will be internalized by the merged entity and hence the variable costs for former Tele2 products will decrease by the NRA costs.
- (170) For the purpose of expressing the margins in percentage terms, the price measure (ARPU) is used.

3.3.3. Computation of incremental margins

- (171) For TMNL and Tele2 NL, incremental margins are calculated by subtracting from the contribution margins per user and segment the avoidable OPEX and avoidable CAPEX depreciation as well as the estimated avoidable cost of capital, which is computed as the product of avoidable net book value and WACC (together the total avoidable costs), per user and segment, as identified by the Parties.⁵⁹ Regarding the segment allocation, the Commission followed the Parties' identified cost allocation criteria.

⁵⁸ In the Statement of Objections the Commission used NRA costs as predicted by TMNL for 2021. However, to address remarks that by 2021 also other inputs may have changed, the Commission in the baseline scenario of this Decision relies on 2018 NRA costs.

⁵⁹ The avoidable costs are multiplied by 10 because they were estimated assuming a 10% reduction of the customer base.

- (172) As explained in Section 3.4, as the Parties' competitors were not able to provide estimates of avoidable costs, the Commission made adjustments based on the estimated avoidable costs submitted by TMNL.

3.4. Data limitations and adjustments

- (173) In the following, the Commission discusses the limitations present in the some of the data and how the Commission addressed them.
- (174) First, several operators, including TMNL, were not able to provide segment level monthly data for voice & data and data only tariffs separately. Therefore, the Commission aggregated voice & data and data only tariffs for all operators and did not carry out separate analyses per tariff type.
- (175) Second, several operators were not able to distinguish accurately between monthly service revenues and handset revenues. The Commission took into account both service revenues and handset revenues in its analysis. By aggregating both types of revenues streams for all operators, total revenues per operator were made comparable.
- (176) Third, several operators were not able to provide comprehensive data for 2016. As the Commission's analysis is based on 2017 data, this has no immediate effects.
- (177) Fourth, several operators were not able to provide meaningful estimates of internal switchers and/or retained customers. As discussed in Section 3.2.1 the Commission therefore uses gross adds as measure of contestable customers.
- (178) Fifth, except for the Parties, none of the operators was able to provide avoidable OPEX and CAPEX in the hypothetical case of a reduction of the subscriber base. Therefore, the Commission applied the percentage reduction in TMNL's contribution margin to calculate the incremental margin of the other operators.
- (179) As regards TMNL's provided data, [...].⁶⁰ [...].
- (180) As regards Tele2 NL's provided data, [...].⁶¹ [...].
- (181) As regards KPN's provided data, there are three main data limitations. First, KPN provided total service revenues only, whereas it was not able to distinguish between the different revenue components.⁶² To estimate the revenues from termination rates for incoming calls/SMS, required for the calculation of the ARPU (see Section 3.2.2), the Commission applied the same revenue per subscriber as observed for VodafoneZiggo, the second largest Dutch operator. Second, KPN included all retail direct costs in the postpaid segment and advised the Commission to only allocate total interconnection costs partly to the prepaid segment.⁶³ The Commission allocated total interconnection costs to the postpaid and prepaid segments based on the distribution of monthly service revenue. Third, as regards the provided MNP data, KPN was only able to make a distinction between its residential and

⁶⁰ See reply of TMNL to RFI 67 and RFI 69.

⁶¹ See reply of Tele2 NL to RFI 68 and RFI 71.

⁶² See reply of KPN to RFI 44 [ID: 2205].

⁶³ See reply of KPN to RFI 63 [ID: 2208].

business customers, however, not between postpaid and prepaid customers.⁶⁴ The Commission allocated the MNP data to the postpaid and prepaid segment (i) for MVNO's according to the segment they are active in and (ii) for KPN's main brands according to the ratio of monthly postpaid and prepaid leavers.

- (182) As regards VodafoneZiggo's provided data, there are two main data limitations related to the provided MNP data. First, regarding the MNP data of hollandsnieuwe, VodafoneZiggo was not able to distinguish between postpaid and prepaid customers and the Commission split the data equally into both segments. Second, VodafoneZiggo was not able to provide the MNP data of Ziggo at provider level. Given Ziggo's small size, the Commission excluded Ziggo's MNP data from its analysis.⁶⁵
- (183) As regards the MVNO Vectone, the Commission established based on the provided data that Vectone was not part of the top 6 MVNOs active in the Dutch market in 2017, contrary to the information provided by the Notifying Party in the Form CO. This was also confirmed by a recent Telecompaper press release stating that Vectone appears to have ended its MVNO business in the Netherlands.⁶⁶ Therefore, the Commission disregarded the data provided by Vectone in its analysis.

3.5. Summary of the key inputs

- (184) Table 9 and Table 10 present an overview of the key inputs for the calibrated merger simulation, in addition to the diversion ratios presented in Section 3.1, on provider and network level, respectively.

Table 9: Overview of the key inputs network level, 2017

		Gross adds Market Shares	ARPU	% Contribution Margins	% Incremental Margins
Private Segment	TMNL	[...]	[...]	[...]	[...]
	Tele2 NL	[...]	[...]	[...]	[...]
Postpaid Private	TMNL	[...]	[...]	[...]	[...]
	Tele2 NL	[...]	[...]	[...]	[...]

⁶⁴ See reply of KPN to RFI 60 [ID: 2214].

⁶⁵ See reply of VodafoneZiggo to RFI 45 [1784].

⁶⁶ See <https://www.telecompaper.com/news/vectone-ends-mvno-services-in-netherlands--1257401> [accessed on 22 August 2018].

Table 10: Overview of the key inputs provider level, 2017

		Gross adds Market Shares	ARPU	% Contribution Margins	% Incremental Margins
Private Segment	TMNL	[...]	[...]	[...]	[...]
	Tele2 NL	[...]	[...]	[...]	[...]
Postpaid Private	TMNL	[...]	[...]	[...]	[...]
	Tele2 NL	[...]	[...]	[...]	[...]

4. RESULTS OF THE CALIBRATED MERGER SIMULATION

- (185) This section presents and discusses the results of the Commission quantitative analysis of non-coordinated retail price effects.
- (186) The Commission finds that on the basis of its quantitative analysis the Transaction gives rise to incentives of the merged entity to increase prices in the private segment. However, the predicted price effects (after accounting for pro-competitive effects linked to the elimination of the NRA) are moderate.

4.1. Baseline scenario of the calibrated merger simulation

- (187) The baseline scenario of the Commission's quantitative analysis is based on 2017 data using contribution margins and diversion ratios based on the intensive and extensive Survey questions. The results are reported for both network level and provider level diversion ratios, and for the postpaid private and overall private segments.

- (188) The Commission has carried out a number of sensitivity analyses to test the robustness of its baseline analysis. The results of the sensitivity analyses are discussed in Section 4.2.
- (189) Table 11 presents the results of the baseline scenario. The table is divided in two panels. The left-hand panel reports the predicted price effects in the postpaid private segment, whereas the right-hand panel reports the predicted price effects in the overall private segment. Each panel contains two columns, reporting the results of the analysis using diversion ratios at network level (first column) and using diversion ratios at provider level (second column). The last row of the table reports the average segment price effect, computed as a revenue weighted average of the price effects of the operators.

Table 11: Calibrated merger simulation baseline scenario results, 2017

	Postpaid Private		Overall Private	
	Network Level	Provider Level	Network Level	Provider Level
TMNL	[5-10]%	[0-5]%	[5-10]%	[0-5]%
TELE2	[5-10]%	[5-10]%	[5-10]%	[0-5]%
KPN	[0-5]%	[0-5]%	[0-5]%	[0-5]%
VODAFONE	[5-10]%	[0-5]%	[0-5]%	[0-5]%
SIMPEL		[0-5]%		[0-5]%
YOUFONE		[0-5]%		[0-5]%
AH_MOBIEL				[0-5]%
LEBARA				[0-5]%
LYCAMOBILE				[0-5]%
Segment Effect	[5-10]%	[0-5]%	[0-5]%	[0-5]%

- (190) In the overall private segment, the baseline scenario of the Commission's quantitative analysis predicts price increases in the range of [0-5]-[5-10]% for TMNL and [0-5]-[5-10]% for Tele2 NL. On average, the model predicts price increases between [0-5]% (provider level) and [0-5]% (network level) in the overall private segment.⁶⁷
- (191) In the postpaid private segment, the baseline scenario of the Commission's quantitative analysis predicts price increases in the range of [0-5]-[5-10]% for TMNL and [5-10]-[5-10]% for Tele2 NL. On average, the model predicts price

⁶⁷ The Commission notes that a more appropriate measure to weight the price effects of the MNOs to compute the average segment effect would be to use the gross adds' revenue share, as opposed to the total revenue shares. This would lead to higher segment price effects as the gross adds' revenue share of the Parties is higher than their revenue shares. Nevertheless, the Commission takes a conservative approach and uses the total revenue shares in light of the fact that the Parties may become less aggressive, hence acquiring less gross adds, post-Transaction.

increases between [0-5]% (provider level) and [5-10]% (network level) in the postpaid private segment.

- (192) Overall, the results of the baseline scenario indicate that the Transaction is likely to give incentives to the Parties as well as to the other market participants to increase prices. This would result in a moderate price increase in the overall private segment.

4.2. Sensitivity analyses of the calibrated merger simulation

- (193) This section presents sensitivity analyses that the Commission has carried out to investigate the robustness of the baseline scenarios. The sensitivity analyses are the following:
- (a) Analysis using the diversion ratios based on the unweighted intensive and extensive survey questions;
 - (b) Analysis using the diversion ratios based on MNP data;
 - (c) Analysis using the diversion ratios based on the intensive survey question;
 - (d) Analysis using the diversion ratios based on intensive and extensive survey questions applying additional screening question;
 - (e) Analysis using long-run incremental margins;
 - (f) Analysis assuming a diversion to the outside good;
 - (g) Analysis using NRA costs of 2019.

4.2.1. Sensitivity analysis using diversion ratios based on the unweighted intensive and extensive survey questions

- (194) This section presents the sensitivity analysis using the diversion ratios based on the unweighted intensive and extensive survey questions.
- (195) Weighting is applied to the survey responses to reflect the actual distribution of the customer populations of the three operators. The Commission considers that weighting is the most appropriate approach and uses weighted diversion ratios in the baseline scenario. Nevertheless, the unweighted diversion ratios are still informative of the first and second choices of the sample of interviewed customers.
- (196) Table 12 presents the results of the sensitivity analysis using diversion ratios based on the unweighted intensive and extensive survey questions.

Table 12: Sensitivity analysis using unweighted diversion ratios, 2017

	Postpaid Private		Overall Private	
	Network Level	Provider Level	Network Level	Provider Level
TMNL	[5-10]%	[5-10]%	[5-10]%	[5-10]%
TELE2	[5-10]%	[5-10]%	[5-10]%	[0-5]%
KPN	[0-5]%	[0-5]%	[0-5]%	[0-5]%
VODAFONE	[5-10]%	[0-5]%	[0-5]%	[0-5]%
SIMPEL		[0-5]%		[0-5]%
YOUFONE		[0-5]%		[0-5]%
AH_MOBIEL				[0-5]%
LEBARA				[0-5]%
LYCAMOBILE				[0-5]%
Segment Effect	[5-10]%	[0-5]%	[0-5]%	[0-5]%

- (197) In the overall private segment, the price effects for the Parties predicted by this sensitivity analysis range between [5-10]% and [5-10]% for TMNL, and between [0-5]% and [5-10]% for Tele2 NL. On average, the model predicts price increases of [0-5]% in the overall private segment.
- (198) In the postpaid segment, the price effects for the Parties range between [5-10]% and [5-10]% for TMNL, and between [5-10]% and [5-10]% for Tele2 NL. On average, the model predicts price increases of [0-5]-[5-10]% in the postpaid private segment.
- (199) Compared to the baseline scenario, the sensitivity analysis using unweighted diversion ratios based on the intensive and extensive Survey questions predicts slightly higher both segment-wide and for the Parties. Overall the weighting of the survey responses does not have a sizeable effect on the results.

4.2.2. Sensitivity analysis using diversion ratios based on MNP data

- (200) This section presents the sensitivity analysis using the diversion ratios based on MNP data.
- (201) As explained in Section 3.1, although compared to the diversion ratios based on survey data the diversion ratios based on MNP data present some limitations, the Commission still considers the MNP data as a valuable source of information on customers' switching behaviours in the retail mobile telecommunication market, and the sensitivity analysis using the MNP diversion ratios is still informative to infer the robustness of the baseline scenario.⁶⁸

⁶⁸ The Commission also notes that compared to the diversion ratios based on the survey intensive question, the MNP diversion ratios are based on a larger and potentially more (statistically) reliable sample.

- (202) Table 13 presents the results of the sensitivity analysis using MNP diversion ratios.

Table 13: Sensitivity analysis using MNP diversion ratios, 2017

	Postpaid Private		Overall Private	
	Network Level	Provider Level	Network Level	Provider Level
TMNL	[10-20]%	[5-10]%	[10-20]%	[5-10]%
TELE2	[10-20]%	[5-10]%	[10-20]%	[5-10]%
KPN	[5-10]%	[0-5]%	[0-5]%	[0-5]%
VODAFONE	[5-10]%	[0-5]%	[0-5]%	[0-5]%
SIMPEL		[0-5]%		[0-5]%
YOUFONE		[0-5]%		[0-5]%
AH_MOBIEL				[0-5]%
LEBARA				[0-5]%
LYCAMOBILE				[0-5]%
Segment Effect	[5-10]%	[5-10]%	[5-10]%	[0-5]%

- (203) In the overall private segment, the price effects for the Parties predicted by this sensitivity analysis range between [5-10]% and [10-20]% for TMNL, and between [5-10]% and [10-20]% for Tele2 NL. On average, the model predicts price increases of [0-5]-[5-10]% in the overall private segment.
- (204) In the postpaid segment, the price effects for the Parties range between [5-10]% and [10-20]% for TMNL, and between [5-10]% and [10-20]% for Tele2 NL. On average, the model predicts price increases of [5-10]% in the postpaid private segment.
- (205) Compared to the baseline scenario, the sensitivity analysis using MNP diversion ratios predicts higher price increases both segment-wide and for the Parties.

4.2.3. *Sensitivity analysis using diversion ratios based on intensive Survey question*

- (206) This section presents the sensitivity analysis using the diversion ratios based on intensive Survey question displayed in Table 31 and Table 32 of Appendix A of this Annex.
- (207) As mentioned in Section 3.1, the diversion ratios based on the intensive Survey question provide information on the likely behaviour of the marginal consumers following a price increase. However, the number of Survey responses underlying the computation of the diversion ratios is relatively low for Simpel. This may question the reliability of the diversion ratios. For this reason, the Commission considers them more appropriate to be included in a sensitivity analysis.
- (208) Table 14 displays the results of the sensitivity analysis using diversion ratios based on intensive Survey question.

Table 14: Sensitivity analysis using diversion ratios based on intensive Survey question, 2017

	Postpaid Private		Overall Private	
	Network Level	Provider Level	Network Level	Provider Level
TMNL	[10-20]%	[5-10]%	[10-20]%	[5-10]%
TELE2	[5-10]%	[5-10]%	[5-10]%	[0-5]%
KPN	[5-10]%	[0-5]%	[0-5]%	[0-5]%
VODAFONE	[5-10]%	[0-5]%	[0-5]%	[0-5]%
SIMPEL		[0-5]%		[0-5]%
YOUFONE		[0-5]%		[0-5]%
AH MOBIEL				[0-5]%
LEBARA				[0-5]%
LYCAMOBILE				[0-5]%
Segment Effect	[5-10]%	[5-10]%	[0-5]%	[0-5]%

- (209) In the overall private segment, the sensitivity analysis predicts price effects in the range of [5-10]-[10-20]% for TMNL, and [0-5]-[5-10]% for Tele2 NL. The segment-wide price effects are between [0-5]% and [0-5]%.
- (210) In the postpaid segment, the sensitivity analysis predicts price effects in the range of [5-10]-[10-20]% for TMNL, and [5-10]% for Tele2 NL. The segment-wide price effects are between [5-10]% and [5-10]%.
- (211) Using the diversion ratios based on intensive Survey questions leads to slightly higher predicted price increases relative to the baseline scenario.

4.2.4. Sensitivity analysis considering exclusively respondents who considered alternative providers when last selecting a mobile tariff

- (212) In the implementation of the current Survey, the question whether at the time of choosing the current provider/payment plan, the respondent had actively considered tariff plans of other providers, was asked.
- (213) The Commission considers that respondents who indicated in response to this question that they actively considered alternative options can be considered particularly well informed customers. Focusing on this set of respondents results in a smaller sample size but the individual responses may be more reliable.
- (214) Table 15 displays the results of the sensitivity analysis using diversion ratios based on intensive and extensive survey questions of such particularly well informed respondents.

Table 15: Sensitivity analysis using diversion ratios of informed respondents, 2017

	Postpaid Private		Overall Private	
	Network Level	Provider Level	Network Level	Provider Level
TMNL	[5-10]%	[5-10]%	[5-10]%	[5-10]%
TELE2	[5-10]%	[5-10]%	[5-10]%	[5-10]%
KPN	[0-5]%	[0-5]%	[0-5]%	[0-5]%
VODAFONE	[5-10]%	[0-5]%	[0-5]%	[0-5]%
SIMPEL		[0-5]%		[0-5]%
YOUFONE		[0-5]%		[0-5]%
AH_MOBIEL				[0-5]%
LEBARA				[0-5]%
LYCAMOBILE				[0-5]%
Segment Effect	[5-10]%	[0-5]%	[0-5]%	[0-5]%

- (215) In the overall private segment, the sensitivity analysis predicts price effects in the range of [5-10]% for TMNL, and [5-10]% for Tele2 NL. The segment-wide price effects are between [0-5]% and [0-5]%.
- (216) In the postpaid segment, the sensitivity analysis predicts price effects in the range of [5-10]% for TMNL, and [5-10]% for Tele2 NL. The segment-wide price effects are between [0-5]% and [5-10]%.
- (217) Using responses informed customers, the model predicts slightly higher price increases. This suggests that the inclusion of customers who did not actively consider alternatives at the time of their last choice of provider in the baseline scenario may bias the price increases in the baseline scenario downwards.

4.2.5. Sensitivity analysis based on incremental margins

- (218) This section presents the sensitivity analysis using the long-run incremental margins. The Commission considers the analysis presented in this section as a conservative estimate of the effects of the merger. As explained in Section 3.3, the Commission does not consider the incremental margins to be the relevant economic margins driving the operators pricing decisions based on the evidence in this case.
- (219) Nevertheless, the Commission has carried out a sensitivity analysis based on long-run incremental margins. Table 16 reports the results of this sensitivity analysis.⁶⁹

⁶⁹ Data on incremental margins for other operators were incomplete. For the purpose of the sensitivity analysis, the Commission made adjustments based on the estimated avoidable costs submitted by TMNL.

Table 16: Sensitivity analysis using long-run incremental margins, 2017

	Postpaid Private		Overall Private	
	Network Level	Provider Level	Network Level	Provider Level
TMNL	[0-5]%	[0-5]%	[0-5]%	[0-5]%
TELE2	[0-5]%	[0-5]%	[0-5]%	[0-5]%
KPN	[0-5]%	[0-5]%	[0-5]%	[0-5]%
VODAFONE	[0-5]%	[0-5]%	[0-5]%	[0-5]%
SIMPEL		[0-5]%		[0-5]%
YOUFONE		[0-5]%		[0-5]%
AH_MOBIEL				[0-5]%
LEBARA				[0-5]%
LYCAMOBILE				[0-5]%
Segment Effect	[0-5]%	[0-5]%	[0-5]%	[0-5]%

- (220) Using incremental margins, the model predicts price increases in the range of [0-5]% for TMNL, and [0-5]% for Tele2 NL in the overall private segment. The average price effect in the private segment is estimated to be in the range of [0-5]%.
- (221) Using incremental margins, the model predicts price increases in the range of [0-5]% for TMNL, and [0-5]% for Tele2 NL in the postpaid segment. The average price effect in the postpaid segment is estimated to be in the range of [0-5]%.
- (222) The results of this sensitivity analysis indicate that using incremental margins the predicted price increases are lower than the baseline scenario.

4.2.6. *Sensitivity analysis assuming a diversion to the outside good*

- (223) This section presents the results of a sensitivity analysis based on the assumption that post-Transaction a portion of each operator’s demand would leave the mobile telecom market, effectively ceasing to use mobile phone services (so called “diversion to an outside good”). In the Commission’s view, it is very unlikely that subscribers would stop using their mobile phones in the event of a price increase. These sensitivity analyses should be rather considered as a proxy for possible decreases in usage following a price increase post-Transaction. Estimating by how much the aggregate usage of mobile services would change as a result of a price increase requires estimating the magnitude of the elasticity of aggregate demand. The Commission is not aware of any study that could provide a reliable indication of such elasticity. For the purposes of this scenario, the Commission applies a diversion to the outside good of 10%. The Commission considers it likely that this figure overstates the usage reductions in response to price increases and hence overstates the constraint on the merged entity from such responses.

(224) Table 17 displays the results of this sensitivity analysis.

Table 17: Sensitivity analysis assuming 10% diversion to the outside good, 2017

	Postpaid Private		Overall Private	
	Network Level	Provider Level	Network Level	Provider Level
TMNL	[5-10]%	[0-5]%	[5-10]%	[0-5]%
TELE2	[5-10]%	[0-5]%	[0-5]%	[0-5]%
KPN	[0-5]%	[0-5]%	[0-5]%	[0-5]%
VODAFONE	[0-5]%	[0-5]%	[0-5]%	[0-5]%
SIMPEL		[0-5]%		[0-5]%
YOUFONE		[0-5]%		[0-5]%
AH_MOBIEL				[0-5]%
LEBARA				[0-5]%
LYCAMOBILE				[0-5]%
Segment Effect	[0-5]%	[0-5]%	[0-5]%	[0-5]%

(225) Assuming a 10% diversion to the outside good in the model results in predicted price effects of [0-5]-[5-10]% and [0-5]% for TMNL and Tele2 NL, respectively, in the overall private segment. Segment-wide, the model predicts an average price effect of [0-5]% in the private segment.

(226) Assuming a 10% diversion to the outside good in the model results in predicted price effects of [0-5]-[5-10]% and [0-5]-[5-10]% for TMNL and Tele2 NL, respectively, in the postpaid segment. Segment-wide, the model predicts an average price effect of [0-5]% in the postpaid segment.

(227) This sensitivity analysis when applying the assumption of 10% diversion to the outside good, the model predicts lower price effects than the baseline scenario both for the Parties and segment-wide.

4.2.7. Sensitivity analysis using NRA costs of 2017

(228) This section presents the results of a conservative sensitivity analysis based on the forecasted average NRA costs of 2017.

(229) As explained in Section 3.3.2, the Commission considers that the forecasted average NRA costs of 2018 are more meaningful as they reflect Tele2 NL's forward-looking pricing.

(230) Table 18 displays the results of this sensitivity analysis.

Table 18: Sensitivity analysis based on average 2017 NRA costs, 2017

	Postpaid Private		Overall Private	
	Network Level	Provider Level	Network Level	Provider Level
TMNL	[5-10]%	[0-5]%	[5-10]%	[0-5]%
TELE2	[5-10]%	[0-5]%	[0-5]%	[0-5]%
KPN	[0-5]%	[0-5]%	[0-5]%	[0-5]%
VODAFONE	[5-10]%	[0-5]%	[0-5]%	[0-5]%
SIMPEL		[0-5]%		[0-5]%
YOUFONE		[0-5]%		[0-5]%
AH_MOBIEL				[0-5]%
LEBARA				[0-5]%
LYCAMOBILE				[0-5]%
Segment Effect	[5-10]%	[0-5]%	[0-5]%	[0-5]%

- (231) Using NRA costs of 2017 the model results in predicted price effects of [0-5]-[5-10]% and [0-5]% for TMNL and Tele2 NL, respectively, in the overall private segment. Segment-wide, the model predicts an average price effect of [0-5]% in the private segment.
- (232) Using NRA costs of 2017 the model results in predicted price effects of [0-5]-[5-10]% and [0-5]-[5-10]% for TMNL and Tele2 NL, respectively, in the postpaid segment. Segment-wide, the model predicts an average price effect of [0-5]-[5-10]% in the postpaid segment.
- (233) This sensitivity analysis shows using the NRA costs of 2017 reduces the price effects both for the Parties and segment-wide.

4.2.8. Summary of the quantitative analysis' results

- (234) Table 19 presents a summary of the predicted non-coordinated price effects resulting from the Commission's quantitative analysis.
- (235) The results of the sensitivity analyses are grouped in (i) sensitivity analyses using different measures of diversion ratios or assuming an outside good (i.e. unweighted Survey sample, MNP diversion ratios, diversion ratios based on intensive Survey question, diversion ratios with an additional screening question, 10% of outside good,⁷⁰); and (ii) sensitivity analyses using different measures of margins (i.e. incremental margins and NRA costs of 2017)⁷¹.

⁷⁰ This group refers to presented results in Table 12 – 15.

⁷¹ This group refers to presented results in Table 16 – 18.

Table 19: Summary of the price effects predicted by the Commission's quantitative analysis in the private segment

	Predicted Price Increases		
	Average Private Segment	TMNL	Tele2 NL
Baseline Scenario	[0-5]%	[0-5]-[5-10]%	[0-5]-[5-10]%
Sensitivity analyses using different measures of diversion ratios or assuming an outside good	[0-5]-[5-10]%	[0-5]-[10-20]%	[0-5]-[10-20]%
Sensitivity analyses using different measures of margins	[0-5]%	[0-5]-[5-10]%	[0-5]%

(236) Compared baseline scenario the sensitivity analyses using alternative measures of diversion ratios or assuming an outside good predict both higher and lower price increases both for the Parties and on average in the private segment. On the other hand, sensitivity analyses using different measures of margins tend to predict lower price increases.

5. THE SURVEY AND THE MERGER SIMULATION SUBMITTED BY THE NOTIFYING PARTY

5.1. The Notifying Party's view

(237) The Notifying Party submitted its own quantitative assessment for the effect of the Transaction on price and on consumer welfare.⁷² The Notifying Party argues that, in contrast to the Commission's model, its approach can better account for important competitive dynamics in the market such as the importance of fixed-mobile bundles and the claim that the merged entity would be better able to compete with KPN and VodafoneZiggo. The Notifying Party also argues that its approach can quantify the effect of variable cost efficiencies as well as the impact of the merged entity offering higher quality FMC products post-merger.

(238) The Notifying Party first conducted a consumer survey presenting respondents with different combinations of fixed and mobile services and uses responses to estimate consumer preferences for price and other product characteristics based on a discrete choice random coefficient random utility model. Second, the Notifying Party then calibrates the estimated model prior to simulating post-merger outcomes. In the calibration stage, the Notifying Party preselects a set

⁷² Form CO, Annex 8(4) and Reply to the 6(1)c Decision, Annex 17, prepared by Compass Lexecon

of available products, scales all estimated preference parameters by a factor 5 so that the implied average profit margin of TMNL is close to its observed average margin and then iteratively (i) estimates unobserved preferences at the product level that are common to all consumers to match a number of observed aggregate market shares ("k-calibration") (ii) excludes products for which its model predicts negative marginal costs. Finally, the calibrated demand model is used to conduct several merger simulation scenarios, both absent efficiencies and including cost synergies and also improvements to the quality of FMC products it offers as claimed by the Notifying Party.

- (239) According to the Notifying Party, its analysis shows that consumers' wellbeing would be improved through the Transaction as price increases resulting from loss of competition would be modest and more than offset by the merged entity offering higher quality FMC products post-Transaction.⁷³
- (240) In its Response to the Statement of Objections, the Notifying Party presented a number of modifications to its quantitative analysis to demonstrate the robustness of its conclusions.⁷⁴ The Notifying Party argued that the Commission's concerns in the Statement of Objections regarding its analysis are without basis and/or empirically irrelevant for the qualitative conclusions it derives from its analysis. In the Notifying Party's view, the central conclusions from its analysis of the Transaction are that (a) the expected price increases would be modest even absent efficiencies; and (b) consumer welfare is expected to increase as a result of the Transaction.

5.2. The Commission's assessment

- (241) The Commission has assessed the Notifying Party's modelling and arguments and maintains its concerns regarding the quantitative analysis presented by the Notifying Party. These concerns on the survey, the preference estimation, the calibration, and the merger simulation are summarised below.
- (242) First, the Commission continues to have concerns regarding the representativeness of survey responses as well as regarding the survey design.
- (243) Regarding representativeness, the Commission considers that the non-probabilistic nature of the selection of survey respondents may lead to biases in the survey responses. Unrepresentativeness is caused by the opt-in nature of non-probability panels, which leads to self-selection. Indeed, the recruiting channels used by the panel provider SKIM include opt-in email, co-registration, e-newsletter campaigns, and traditional banner placements, which are controversially discussed in the literature, as they may not ensure to attract a representative sample of the relevant population. In its Reply to the SO, the Notifying Party argues that the literature shows that some 'probability' based samples do not stand out as consistently more accurate than the nonprobability samples. However, even the research cited by the parties suggests that

⁷³ Reply to Art. 6(1)c Decision, para 551.

⁷⁴ Reply to the Statement of Objections, Annex 5(1) and Appendix A to Annex 5(1), prepared by Compass Lexecon.

probability samples –even with low response rates– tend to produce more accurate estimates.⁷⁵

- (244) Moreover, even on the basis of observable demographic characteristics the Notifying Party’s survey suffers from significant imbalances. In the Response to the Statement of Objections the Notifying Party presented results when survey responses are weighted to match the age distribution of Dutch consumers. In this scenario, the estimated price effect resulting from the Transaction increase⁷⁶ which would support the concern of bias. The Commission further notes that whereas weighting alleviates biases due to imbalances of observed characteristics, it cannot solve the issue of potential biases caused because of imbalances concerning unobserved characteristics of panellists.
- (245) Regarding the design of the survey, the Commission considers that survey is unlikely to reflect the choice process of many consumers as it assumes that consumer always chose a combination of fixed and a mobile components. By the survey design, a consumer who does not chose a fixed component will have “[n]o access to Internet, landline and Pay-TV at home”.⁷⁷ The Commission considers that this is unlikely to reflect the choice process of many consumers who decide on a mobile product without simultaneously choosing a fixed product.⁷⁸ The modification proposed in the Response to the Statement of Objections does not address this concern.⁷⁹ While the Notifying Party removes the “mobile only” attribute and hence changes consumer preferences somewhat compared to its estimation, the choice process by consumers still involves choosing mobile component and a fixed component jointly (with the associated costs) in that modified version. In contrast to the Notifying Party's claims, this version of the model hence does not model the choice of mobile products of consumers that have access to a fixed component for free. The Commission's concern therefore remains.
- (246) Another concern is that the Notifying Party's survey design involves consumers being confronted with entirely fictitious products that have no correspondence to real products available in the market. The Notifying Party argues that this is done on purpose to avoid endogeneity problem and uses variation in product characteristics that is designed to allow for an efficient estimation of preference parameters, which is not meant to reproduce reality.⁸⁰ However, the

⁷⁵ Kennedy et al. (2016) compare the accuracy of 9 different non-probability panels and 1 probability panel. Kennedy et al. (2016) point out that the only probability sample included in the study other than those used as benchmarks (the Pew Research Center's probability-based panel, ATP) "had the lowest average estimated bias on measures unrelated to civic engagement". The other two studies cited by the parties contain no empirical comparison of probability and non-probability samples against a reliable benchmark. Nevertheless, Brick (2011), concludes that “a well-conducted probability sample with a low response rate is likely to be of higher quality (lower average bias for a broad range of estimates) than a sample of volunteers” (p. 884).

⁷⁶ See Reply to the Statement of Objections, Appendix A to Annex 5(1), Section 3.

⁷⁷ See file “Project Forest - choice modelling design - 170606.xlsx”.

⁷⁸ One indication that mobile choices are done often separately from choices of fixed components is the relatively high number of gross adds for pre-paid mobile tariffs which the Notifying Party points to in Section 13 of Appendix A to Annex 5(1) of the Reply to the Statement of Objections.

⁷⁹ See Reply to the Statement of Objections, Appendix A to Annex 5(1), Section 13.

⁸⁰ See response to Q&A by Prof. Frank Verboven at the OH.

Commission considers that the fictitious nature of the choices with which consumers are presented casts doubt on the reliability of preferences that are recovered from such surveys as responses are neither linked to actual past choice situations of the respondents, nor are respondents otherwise incentivised to carefully consider the (purely hypothetical) product options presented to them.

- (247) Second, the estimation stage of the model is not sufficiently stable and reliable.
- (248) The Statement of Objections argued that the Notifying Party's econometric model estimates were potentially subject to instability stemming from at least two sources. The simulation based estimation uses much fewer estimation simulation draws than what is sufficient for reliable results as per the relevant academic literature.⁸¹ Even with the same number of estimation simulation draws used by the Notifying Party the results may considerably change when a different set, but same number, of simulation draws is used.⁸²
- (249) The Notifying Party argues in the Response to the Statement of Objections that the literature quoted by the Commission on the need to increase the simulation draws is not relevant. This literature suggests using 1000 or more draws, or starting at 500 draws and increasing until stable results arise.⁸³ According to the Notifying Party, these suggestions are irrelevant for the present case, as the Notifying Party's model involves a simpler, no-correlation-across-attributes structure, while those in the literature are more complex and so these latter need more simulation draws (as opposed to the Notifying Party's model). The Commission notes that the proposition of 1000 draws in the cited paper explicitly refers to a no-correlation structure model similar to that of the Notifying Party.⁸⁴ The Commission concludes that there is no objective, empirical basis for the claim that the estimation results are "similar" to that in the baseline scenario. In fact, the estimation results are likely yet not stabilised, and hence are not reliable.
- (250) Further, in the Response to the Statement of Objections, the Notifying Party shows results with an increased number of simulation draws⁸⁵ and, separately, using a different set of simulation draws (with the same number of estimation simulation draws as in the baseline model).⁸⁶ In both cases, the Notifying Party merely claims that the recovered consumer preference estimates are "similar"

⁸¹ Statement of Objections, Annex A, paragraph 249.

⁸² Statement of Objections, Annex A, paragraph 250.

⁸³ Gu, Hole and Knox (2013), page 388. This paper is co-authored by the author, Arne Risa Hole, of the Stata command ("mixlogitwtp") used by the Notifying Parties. The technical description ("help") of the command also mentions the paper. Hole, A. R. and J. R. Kolstad (2012): "Mixed logit estimation of willingness to pay distributions a comparison of models in preference and WTP space", *Empirical Economics*, 42, pages 445–469.

⁸⁴ See Hole, A. R. and J. R. Kolstad (2012): "Mixed logit estimation of willingness to pay distributions a comparison of models in preference and WTP space", *Empirical Economics*, 42, page 453.

⁸⁵ Reply to the Statement of Objections, Appendix A to Annex 5(1), Section 5.

⁸⁶ Reply to the Statement of Objections, Appendix A to Annex 5(1), Section 6. Technically, the number of so-called burn draws is increased. These are draws from the assumed distribution before drawing the estimation simulation draws. By changing the number of burn draws, one gets a different set of subsequent estimation simulation draws.

to the baseline and, hence, the Commission's concerns have "no empirical basis".⁸⁷

- (251) The Commission notes that in both cases the recovered preference estimates change significantly. Regarding the case of the increased estimation simulation draws, when estimating an otherwise identical dataset, mean coefficients change on average by 16%, and out of 22 parameters 9 changes by 10% or more, with the largest changes being 46, 64 and 61%. Moreover, the model's standard deviation parameters are even more unstable. Yet, according to the Notifying Party these latter parameters are important as they give the model a needed flexibility as opposed to the more restrictive standard logit model.⁸⁸ These parameters change on average by 107%. For example, one of the estimates changes from 1.625 to 15.528, a change of 856%. Out of the 20 standard deviation parameters, 7 also change statistical significance.
- (252) Regarding the case of the different set of simulation draws, the results seem even more unstable. The estimated mean coefficients change on average by 15%, and out of 22 parameters 9 changes by 10% or more, with the largest changes being 29%, 66% and 70%. Again, the model's standard deviation parameters are even more unstable, with an average change of 131%, and the largest change being from 1.625 to 19.181, or 1080%. Also, out of the 20 standard deviation parameters 9 change statistical significance. The Commission concludes that there is no objective, empirical basis for the claim that the estimation results are "similar" to that in the baseline scenario. In fact, the estimation results are not stable, and hence are not reliable.
- (253) The Commission notes that the Notifying Party does not show that the overall results of the model, that is, the results of the subsequent calibration and merger simulation stages, remain similar. There is hence no basis to conclude that the implications of the model are robust to these changes in the estimation.⁸⁹
- (254) Third, the calibration of the estimated parameters prior to the simulation stage is problematic, relies on arbitrary assumptions and significantly changes diversion ratios.
- (255) The Commission noted in the Statement of Objections that the demand model arising from the estimated distribution of consumer preferences, when fed with the actual products available does not reproduce observed market characteristics such as market shares by provider or across different segments.⁹⁰ At a minimum, this suggests that unobservable factors play a major role in the relevant market, casting doubt on the relevance of the Notifying Party's choice experiments and subsequent estimation.

⁸⁷ Reply to the Statement of Objections, Appendix A to Annex 5(1), paragraphs 5.2 and 6.3.

⁸⁸ Form CO, Annex 8A (4), page 6.

⁸⁹ When the Commission tried to investigate the similarity in terms of the subsequent stages' results, it found that (i) the model fails to converge in some scenarios at the simulation stage with the estimates from the increased simulation draws case; and (ii) the Notifying Party's calibration approach fails when applied to the estimates from the different set of simulation draws case. This in itself indicates that the Notifying Party's model is unstable and highly sensitive to changes in estimated parameters that the Notifying Party considers to be "similar" to those in the baseline.

⁹⁰ Annex A to Statement of Objections, paragraph 256.

- (256) As demonstrated in the Statement of Objections, the calibration stage of the Notifying Party's modelling drastically changes diversion ratios between the Parties.⁹¹ The calibration stage (which already requires a full modelling of competition in the markets to obtain margin predictions) hence has a strong impact on closeness of competition. The Reply to the Statement of Objections does not dispute this. Rather, the Notifying Party seems to take the view that changes to its estimated preferences during calibration are necessary and normal to make the model fit reality, and that the diversion ratios after calibration are the relevant ones for the purposes of the merger simulation. The calibration choices therefore deserve particular scrutiny.⁹²
- (257) In particular, the Commission set out in the Statement of Objections, that the k-calibration is likely to push diversion ratios closer to benchmark diversions (calculated by assuming that consumers switch to competitors in proportion of the market shares of the respective competitors), as it introduces an unobserved value component for each product that is assumed to be constant among consumers. This tends to make the valuation of a given product more uniform among consumers and (together with the assumed distribution of the random error term) tends to result in switching patterns whereby the chance that a consumer churns to given products is proportional to the market share of these products. Hence, by pushing diversions closer to benchmark diversions, k-calibration appears to dilute the high diversion ratios between the Parties emerging directly from the estimation. The Notifying Party did not dispute this finding.
- (258) The Notifying Party's calibration approach also identifies products for which, given the calibrated k-factors, the assumed model of competition assigns a negative cost. The Notifying Party solves this problem by simply removing such products from the retained set of products and by reiterating the k-calibration until all remaining products have non-negative estimated marginal costs. The appearance of such instances again points to problems in the modelling and calibration.
- (259) Moreover, in the Response to the Statement of Objections the Notifying Party confirmed the Commission's concern that the margin predictions in its model indeed change in a non-linear fashion with its scaling parameter. This demonstrates that the calibration procedure (scaling parameter followed by k-calibration and elimination of some products) introduces a complex relationship between the price sensitivity parameter (which is modified by a factor 5 relative to the estimation stage) and implied margins. The Notifying Party does not explain this feature and only shows the relationship over a relatively narrow range corresponding to scaling factors between 2.5 and 13.3.
- (260) In the Response to the Statement of Objections the Notifying Party argues that the Commission misunderstands the role of the product level utility adjustments ("k-factors") which are introduced to calibrate market shares. According to the Notifying Party, these k-factors are "empirically obtained

⁹¹ Annex A to Statement of Objections, tables 21 to 24.

⁹² In contrast, diversion ratios based on the Survey (relied upon by the Commission) or derived from MNP data provide direct (empirical) measures of the degree of substitution between the merging parties without the need for further calibration.

residuals”⁹³ that reflect unobserved heterogeneity at the product level (i.e. product features not captured by the observed characteristics). They would have “econometric properties”⁹⁴ and would be independent from the observable product characteristics. The Commission cannot accept this reasoning. In the first place, the k-factors are introduced during the calibration stage, i.e., after the econometric estimation of preferences. Therefore they cannot be considered to have econometric properties (such as independence from observed characteristics) and any analogy to residuals in an econometric estimation is unsound.⁹⁵ Second, the Notifying Party’s approach does not empirically determine unobserved heterogeneity at the product level as the Notifying Party only uses firm/segment level market shares in the calibration. Since there are far fewer provider-level market shares than products it is not possible to determine product level residuals without further arbitrary assumptions.⁹⁶ The product level k-factors hence are not “empirically obtained residuals” at the product level that could reflect unobserved heterogeneity in product level features, as the product level variation within firm and segment is entirely driven by calibration assumptions.

- (261) Fourth, the quantification of efficiencies in the **merger simulation** cannot be accepted.
- (262) In the first place, the claimed FMC benefits appear ad-hoc. The merging parties or its competitors decide on parameters like data allowance of mobile packages or speed of fixed internet and, in contrast to the price choices, the Notifying Party's quantitative analysis does not model what quality parameters would be set optimally with or without the transaction.
- (263) In the second place, the claimed overall positive consumer welfare effect of the Transaction after the introduction of the full claimed FMC benefits is the result of the merged entity improving all seven of its post-merger FMC products until six of the seven have identical observable product characteristics that exceed the best product characteristics of TMNL’s current flagship FMC product.⁹⁷
- (264) As explained in the Statement of Objections the overall consumer welfare impact is, to a significant extent, due to three product combinations that combine a TMNL mobile component with a Tele2 fixed component which achieve post-FMC benefits a joint market share of more than [...] (as opposed to a joint market share of [...] of the four pre-existing FMC products of TMNL post-FMC benefits). This “success” of the new FMC products is due to an arbitrary restriction during calibration which assigns these products high k-factors (i.e. highly desirable unobserved product characteristics in the

⁹³ Reply to the Statement of Objections, Annex 5(1), para 2.89.

⁹⁴ Reply to the Statement of Objections, Annex 5(1), para 2.81 or 2.88.

⁹⁵ E.g. Reply to the Statement of Objections, Annex 5(1), para 2.76

⁹⁶ Specifically, the Notifying Party chose product level k-factors that minimise the changes in the product level share predicted by the unadjusted model (using the sum of squared changes in share as a criterion to be minimized). There is, however, no empirical basis that this would be the correct approach. For example, the Notifying Party could equally well have chosen a firm/segment or brand level unobserved preference parameter. Moreover, the Notifying Party introduces arbitrary minimum market share thresholds that drive deviations from this principle and allocates high unobserved consumer preferences to bundles that combine a TMNL mobile component with a fixed component from Tele2 NL.

⁹⁷ Statement of Objections, Annex A, Table 28. The only difference to the seventh product is that it has 300 voice minutes included instead of unlimited voice minutes.

description of the Notifying Party) in order to restrict their predicted market share from falling below an arbitrary threshold of 0.01%.⁹⁸ The Commission considers that such arbitrary assumptions cannot be a sound basis for quantifying the effect of improvements in product quality. The Notifying Party argues that (i) effects of this approach would be second order, and (ii) that not applying FMC benefits to these products would ex-ante eliminate consumer benefit from improving such product (even though they have minimal market share pre-merger and that only by assumption). However, these arguments cannot deter from the fact that the claimed consumer welfare impact arising from these products is arbitrary, and hence they cannot be accepted.⁹⁹

- (265) Moreover, and more generally, in a random utility model, such as the one employed by the Notifying Party, offering consumers several versions of the same product will increase total demand of the product as it gives consumers several chances to “like” the same product through several independent draws of the random utility component.¹⁰⁰ The Commission considers that this approach inflates the effect of the claimed FMC benefits on consumer welfare and has demonstrated this by showing the overall consumer welfare impact remains negative even after efficiencies if the FMC benefits are applied to only one, instead of seven, products (while keeping the other products with the more limited FMC benefits). The Notifying Party’s argument that this would ignore that products are horizontally differentiated through their unobserved heterogeneity is without effect, because, as explained above, there is no empirical basis for determining unobserved heterogeneity at the product level. In addition, as, in contrast to price changes, the change of product characteristics is not the result of an optimal choice modelled in the analysis, the merging parties might also find it optimal to change some of the characteristics of their products absent the Transaction. The assumption that all seven FMC products would benefit from these changes post-Transaction and would be almost identical in terms of observable characteristics while no

⁹⁸ Statement of Objections, Annex A, paragraph 293 and footnote 98 which demonstrates that the effect of this additional arbitrary minimal market share assumption on k-factors as well as on the consumer welfare impact are sizeable. In particular, using a more stringent (smaller) threshold reduces the consumer welfare impact significantly.

⁹⁹ The Commission also maintains, that, in the specific industry in question, it is unlikely that unobserved product features play a major role for consumer choices and that such features might also change following post-merger integration. For example, many of the possible unobserved characteristics pointed to by the Notifying Party (Reply to the Statement of Objections, Annex 5(1), para 2.89) are likely to be affected by integration and harmonised (e.g. mobile data download speeds, underlying technologies, TV packages) while other, intangible elements such as herding effects and non-monetary switching costs) would rather disadvantage products that attract no initial demand suggesting that such products, if anything, should rather be assigned very low unobserved utility components. In fact, the Statement of Objections demonstrated that the implied unobserved characteristics, or k-factors, for the products in question would be substantially lower than what reported by the Notifying Party had a more stringent, that is, smaller, threshold been applied (see the footnote above, as well as footnote 98 of the Statement of Objections Annex A, paragraph 293, referenced above).

¹⁰⁰ The Notifying Party’s argument that this would be due to an IIA property which would not be a feature of its random coefficient model is beside the point. While random coefficients weaken the IIA property at the aggregate level, it is still present at the level of individual consumers. Any increase in demand that is achieved by offering the same product multiple times will still be the direct result of the effect described by the Commission.

changes would be introduced absent the Transaction hence remains entirely ad-hoc.

- (266) Overall, the claimed consumer welfare impact of quality increases are the result of applying ad-hoc FMC benefits to all seven FMC products hence cannot be accepted.
- (267) Fifth, the estimation, calibration and simulation stages are very complex, very computationally intensive and unstable. Individual runs of the model can take many hours of computer time and often fail to converge.¹⁰¹ This complexity and instability limits the extent to which the Commission can assess the quantitative analysis of the Notifying Party and hence the evidentiary weight that can be given to such analysis.¹⁰²
- (268) In conclusion, in particular for the above-mentioned reasons, the Commission maintains several concerns in relation to the Notifying Party's quantitative analysis. However, it is not necessary to take a final position on the question whether any probative value should be attached to the Notifying Party's quantitative analysis for the purposes of this Decision. This is because the Commission ultimately concludes that the Transaction does not give rise to a significant impediment to competition, which largely coincides with the findings of the Notifying Party's quantitative model.

6. CONCLUSION

- (269) The Commission carried out a quantitative assessment of the likely retail price effects resulting from the elimination of horizontal competition between TMNL and Tele2 NL. This assessment is based on a calibrated merger simulation approach which is an extension of the methodology used in support of the findings presented in the Article 6(1)(c) Decision.
- (270) The Commission's first baseline scenario relies on information on contribution margins and diversion ratios based on the intensive and extensive survey questions. The model predicts price increases for TMNL and Tele2 NL of respectively [...] and [...] in the overall private segment. The resulting segment-wide predicted price effects are in the range of [...] in the overall private segment.
- (271) As discussed in Section 4.2, the Commission has carried out a number of sensitivity scenarios based on a number of alternative assumptions. These consist in (i) using the unweighted intensive and extensive Survey questions, (ii) using the MNP diversion ratios, (iii) using the diversion ratios based on

¹⁰¹ Statement of Objections, Annex A, footnote 30 and footnote 89 at paragraph 253 above.

¹⁰² Moreover, while discussions with the Notifying Party on their modelling began in pre-notification, the final version of the code underlying the estimation was submitted with the Form CO and the code underlying the simulation with the response to the Art 6(1)c decision, the Commission received a detailed note documenting the complex calibration, which was agreed at an economist meeting on 12 July 2018, only on 6 August 2018. In contrast, the files submitted as supporting materials to the Reply to the Statement of Objections show that the results of an updated survey and simulation exercise were available at least as early as 9 July 2018. While the raw data files for updated product lists and market shares for are 20 July 2018 or earlier. While the Notifying Party had indicated that it was working on updated results, these analyses were only submitted to the Commission as supporting material to the Reply to the Statement of Objections on 1 October 2018.

intensive Survey question only, (iv) using the diversion ratios based on intensive and extensive survey question applying an additional screening question, (v) using incremental margins, (vi) assuming a diversion to the outside good, (vii) assuming NRA costs of 2017. The results of the sensitivity scenarios display sometimes higher price effects and sometimes lower price effects relative to the baseline scenario.

- (272) Overall, the results of the Commission's quantitative analysis indicate that the loss of competition between the Parties gives rise to incentives of the merged entity to increase prices in the private segment. However, the predicted price effects (after accounting for pro-competitive effects linked to the elimination of the NRA) are moderate.

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APPENDIX A: DIVERSION RATIOS BASED ON INTENSIVE SURVEY QUESTION

Table 20: Diversion ratios based on intensive survey question, 2017, network level.

Overall Private	TMNL	TELE2	KPN	VODAFONE
TMNL	-	[20-30]%	[30-40]%	[30-40]%
TELE2	[30-40]%	-	[30-40]%	[20-30]%
Postpaid Private	TMNL	TELE2	KPN	VODAFONE
TMNL	-	[20-30]%	[30-40]%	[30-40]%
TELE2	[40-50]%	-	[30-40]%	[20-30]%

Table 21: Diversion ratios based on intensive survey question, 2017, provider level.

Overall Private	TMNL	TELE2	SIMPEL	KPN	VODAFONE	OTHER
TMNL	-	[10-20]%	[10-20]%	[30-40]%	[30-40]%	[0-5]%
TELE2	[30-40]%	-	[5-10]%	[30-40]%	[20-30]%	[0-5]%
SIMPEL	[30-40]%	[10-20]%	-	[20-30]%	[10-20]%	[10-20]%
Postpaid Private	TMNL	TELE2	SIMPEL	KPN	VODAFONE	OTHER
TMNL	-	[10-20]%	[10-20]%	[30-40]%	[30-40]%	[0-5]%
TELE2	[30-40]%	-	[0-5]%	[20-30]%	[20-30]%	[0-5]%
SIMPEL	[30-40]%	[10-20]%	-	[20-30]%	[10-20]%	[10-20]%

ANNEX B: REPORT RESEARCH TELE2 AND TMOBILE



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Consumer Study

The Switching behaviour of Tele2 and T-Mobile Customers

Zoetermeer, July 27th 2018

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Table of Contents

1	<u>Introduction</u>	4
2	<u>Justification</u>	4
2.1	<u>Method</u>	5
2.2	<u>Population</u>	5
2.3	<u>Sample</u>	5
2.4	<u>Fieldwork and response</u>	6
2.5	<u>Questionnaire</u>	7
2.6	<u>Weights</u>	7
2.7	<u>Reliability</u>	9
2.8	<u>T-Mobile prepaid</u>	9
2.9	<u>Extra interviews and data correction Tele2 – Gross Adds</u>	9
3	<u>Results</u>	11
3.1	<u>Current contract and its commencement</u>	11
3.2	<u>Costs of usage and the effect of price ratio's on the choice for a provider</u>	14
3.3	<u>Miscellaneous Questions</u>	20
	<u>Annexes</u>	23
	<u>Annex 1: Questionnaire</u>	23
	<u>Annex 2: Detailed Response Overview</u>	34
	<u>Annex 3: T-Mobile Prepaid Analysis</u>	35
	<u>Annex 4: Unweighted sample size to background characteristics</u>	36
	<u>Annex 5: Disaggregated tables</u>	38

1. Introduction

At the end of 2017, T-Mobile Netherlands announced that it intended to acquire the telecom company 'Tele 2 Netherland'. German mother company of T-Mobile Netherlands Deutsche Telekom explained that with the acquisition, it intended to break open the Dutch services market and compete with KPN and Vodafone-Ziggo.

After the acquisition, Deutsche Telekom will own 75 percent of shares, while the Swedish mother company of Tele2 Netherlands will be left with 25 percent of the shares. As of now, Tele2 Netherland has 5 million customers in the mobile communication market with an annual turnover of 2 billion euros, which amounts to a market share of around 25 percent in the Netherlands.

De Europese Commissie en de Autoriteit Consument en Markt (ACM) hebben de overname van Tele2 door T-Mobile in onderzoek. Onderdeel hiervan is een consumentenonderzoek onder Customers van T-Mobile, Tele2 en Simpel.

The European Commission and the 'Autoriteit Consument en Markt (ACM, the Dutch Competition Agency) are investigating the acquisition of Tele2 by T-Mobile. Part of this investigation is a study on the behaviour of customers of T-Mobile, Tele2 and another Dutch telecom company named Simpel

The goals of this study are defined as follows:

- Establish the switching behaviour of customers
- Establish the extent to which the aforementioned companies are in competition with each other
- Establish which factors are the most important decisive factors for consumers when making a choice between companies.

In this report, first, the study itself will be further explained. Subsequently the results will be presented. In the annexes the results are disaggregated by several consumer background characteristics. Justification

2. Justification

2.1 Method

Preceding the study, two sample frames have been considered: 1) customer databases which were provided by the companies themselves and 2) at research firms available access panels. After studying the possibilities the decision was made that a telephone survey with the help of the customer databases would provide the most representative data of customers who have recently gone through the choosing and switching (or not-switching) process. The choice for a computer assisted telephone interviewing (CATI) survey was made because for large parts of the customers no e-mail address could be provided. Moreover, experience has shown that online surveys through e-mail invitations have very low response rates.

2.2 Population

In this study, the population consists of all mobile telephone numbers belonging to customers of T-Mobile, Tele2 and Simpel for which a contract was signed or extended in the period from November 1st 2017 and April 30th 2018. It was determined preliminarily that Tele2 would not be able to supply sufficient cases for the prepaid market segment to reach a satisfactory sample size. To reach the desired sample size of 9.000 cases data from earlier months was included in the sample. For 'gross add' (influx of new customers from other brands) data up to March 2nd 2017 was included, and for switchers data up to December 5th 2016.

In the data a distinction is made between prepaid and postpaid numbers. Additionally a distinction is made between so called 'gross adds' and 'internal switchers'. Gross adds are defined as new customers that receive their first mobile connection or flow in from other providers. Internal switchers are pre-existing customers that had another type of contract or a contract with a different sub-brand, or customers whose contact was extended.

2.3 Sample

De sample requirements (description of and desired size per market segment) were communicated to the providers by the European Commission and the ACm on May 4th 2018. On May 7th 2018, the providers supplied the required sample files. These files contain the following amounts of mobile phone numbers:

table 1 Sample files delivered by providers

<i>Provider</i>	<i>Connection Type</i>	<i>Number</i>
Tele2	Postpaid	21.000
Tele2	Prepaid	9.000
T-Mobile	Postpaid	21.000
T-Mobile	Prepaid	9.000
Simpel	Postpaid	12.000

These numbers concern a random sample from the population described in section 2.2. During the execution of the fieldwork quota were implemented to ensure that relevant subsections of the population would contain sufficient observations. Table 2 gives an overview of the target numbers for each subsection.

table 2 Target numbers by quota

<i>Provider</i>	<i>Connection Type</i>	<i>Number</i>
Tele2	Prepaid	300
Tele2	Postpaid	700
T-Mobile	Prepaid	300
T-Mobile	Postpost	700
Simpel	Gross adds	250
Simpel	Internal Switchers	250

2.4 Fieldwork and response

The fieldwork was executed from June 4th 2018 until July 11th 2018. Table 3 gives the complete overview of response and non-response.

table 3 Response overview

	Simpel	Tele2		T-Mobile	
	Postpaid	Postpaid	Prepaid	Postpaid	Prepaid
Gross sample received	12.000	21 000	9.000	21 000	9.000
Spare / not used	5.916	14 284	2.162	10.495	0
Not used (tel. number already exists)	169	22	50	9	13
Opt out (screened out on research conditions)	19	7	8	7	16
No telephone number	1	0	0	0	0
Not used (no contact attempts)	2.203	2 873	2.815	4.045	554
Unreachable (less than 5 contact attempts, quota full)	2.483	2 050	852	2.240	2.409
Unreachable (5 contact attempts, put away)	0	330	1.506	620	3.377
Used sample	1.209	1.434	1.607	3.584	2.631
Technical non-response	119	191	804	2.133	1.155
Non-response	376	379	221	544	384
Screen out, during interview	203	138	215	193	624
Cleaned, during reporting	6	10	33	10	9
Successful: target group	501	756	334	704	286
Response rate	41%	53%	21%	20%	11%
Extra target group (see §2.8)					173

Further detail of the (technical) non-response, screen-outs and data cleaning is displayed in annex 3. The screening and cleaning are based on the following sample requirements:

1. The survey starts with questions about the provider brand and the connection type (prepaid or postpaid). The answers to these questions have to correspond to the data present in the sample files.
2. The respondent and user of the number should be at least 18 years of age.
3. The number should be the main number of the respondent.
4. The respondent should have chosen for his current contract individually. This excludes numbers that are used purely for business purposes only.

In the detailed response overview it is shown that the percentage of refusals to cooperate (non-response) is just lower than the percentage of persons that cooperated. Most of the refusers indicate that they do not want to cooperate or that they don't have time. A smaller portion wishes not to cooperate out of principle.

The detailed overview also shows that there are a lot of impurities in the supplied sample files. This is primarily shown under 'technical non-response'. In particular in the case of T-Mobile (excluding the postpaid-internal switchers category) and somewhat in the Tele2 prepaid segment a large portion of the numbers appeared not to exist (anymore). Additionally, respondents in this category often indicate that they have (or in the meantime acquired) a different provider. Consequently, the net response rate is significantly lower than the gross value. The target net response of N=300 has not been made by a small margin due to the higher drop-out right and non-response, even though extra interviews were done with T-Mobile prepaid customers. The effect of the smaller sample size on the reliability of the results is negligible.

2.5 Questionnaire

A questionnaire with predefined routes based on given answers and sample characteristics was used. The questionnaire is added to this report in annex 1. The average interview time of the reported complete interviews was six minutes and 5 seconds. Preceding the fieldwork the questionnaire was tested on the basis of 50 interviews. As a consequence of this test some editorial changes have been made to the text of the questionnaire.

2.6 Weights

The net sample has been weighed in three parts: T-Mobile, Tele2 and Simpel. The weight targets have been supplied by the providers. The basis of these targets is the population of interest which was described in section 2.2.. For the population a so called joint frequency count was supplied, which is matrix with cells for each telephone number for all combinations of background characteristics presented in table 4. Subsequently the cases were weighed by the matrix.

table 4 Weight variables

Variable	Number of categories
Switch type	2 (internal switchers, gross adds)
Connection type (T-Mobile & Tele2 only)	2 (postpaid, prepaid)
Sex	2 (male, female)
Age	7 (7 age cohorts of around 10 years)

The matrices for Tele2 en T-Mobile contain of 48 cells each. The matrix for Simel has 24 cells because Simple clients are all classified as postpaid.

Each of these cell hold a certain proportion of the total population. E.g. the group of T-Mobile – gross add – postpaid – female – age 45 to 54 is appr. [...]% of the total target group population for T-Mobile. The same 48 cell matrices (24 of Simpel) was calculated for the nett research samle. Weights were determined by deviding the individule cells in the population matrix by the matching cells in the nett sample matrix. E.g. the share of the T-Mobile – gross add – postpaid – female – age 45 to 54 is appr. [...]% of the nett sample for T-Mobile. The weight for this group/cell is calculated by deviding [...]% by [...]% which results in a factor 1.09.

The ratios between the net sample and the population are presented in table 5. The differnces have been corrected for through weighing of the samples.

table 5 Ratio between the net sample and the population

Tele2	sample		population	
	GA	IS	GA	IS
Postpaid	[...]	[...]	[...]	[...]
Prepaid	[...]	[...]	[...]	[...]
T-Mobile	sample		population	
	GA	IS	GA	IS
Postpaid	[...]	[...]	[...]	[...]
Prepaid	[...]	[...]	[...]	[...]
Simpel	sample		population	
	GA	IS	GA	IS
Postpaid	[...]	[...]	[...]	[...]

**T-Mobile could not provide details about the ratio between gross add and internal switchers in their prepaid segment. Consequently these respondents could not be weighted according to their relative proportion in the population.*

2.7 Reliability

The statistical margin of error with a confidence level of 95% on the level of the providers is about 3% for T-Mobile and Tele2 and 4% for Simpel. When the results are split according to connection type this value is 6% for Tele2 and T-Mobile prepaid and 4% for Tele2 and T-Mobile postpaid.

2.8 T-Mobile prepaid

During the first days of field work it was noticed that a large portion (55%) of customers T-Mobile indicated had prepaid connections, said they had postpaid connections themselves. Up until then, this was a reason for exclusion from the sample. Keeping in mind the high percentage and the absence of a watertight explanation, we chose to complete the interviews with these persons and isolate the results for further analysis.

This analysis (presented in annex 3) showed that this group of respondents, which T-Mobile indicated had prepaid connections but said they had postpaid connections themselves, were very similar to the group of 'regular' postpaid customers. It was decided to exclude these respondents from the 'T-Mobile prepaid' weighting cell, because they claimed to have a postpaid connection and were similar to this group in their answers. As of now, this group has been excluded from the results in this report entirely.

2.9 Extra interviews and data correction Tele2 – Gross Adds

During the fieldwork there were quota for provider and connection type. At Simpel there were also quota for switchers and gross adds. In the case of T-Mobile the ratio switchers / gross adds in the net sample is in line with the data about the population. In the case of Tele2 this is less so. This is illustrated in the table below:

Table 6 Ratio's Gross Adds vs. Internal Switchers Tele2

[...]

Due to the selective non response and the drop-out rate, the number of gross adds in the sample was relatively low. This effectuates the following challenges:

- 1) The deviation from the ratio in the population can lead to high weightfactors and inefficient weighing.
- 2) The absolute number of cases lies below the 50 to 60 cases that is usually seen as the minimum number needed for quantitative research.

Consequently, extra interviews were held with gross add Tele2 customers to increase the number of cases for this category:

- Prepaid: 32 extra interviews,
final total: 60
- Postpaid: 54 extra interviews ,
final total: 100

The new total allow us to weigh the samples efficiently and provide a more solid basis for the analyses. In total, 32 prepaid switchers and 54

postpaid switchers have been randomly deleted from the sample to reduce the total net sample for tele2 to N=1000. In the response overview in section 2.4 these extra 86 interviews have been added. Additionally, the data that was deleted from the definitive records with Tele2 switchers have been included in the response overview.

3. Results

This chapter presents the results of the study. The presentation follows the order of the questionnaire. The results are presented separately for the different providers (Tele2, T-Mobile and Simpel).

3.1 Current contract and its commencement

The first part of the questionnaire consisted of a number of questions on the current contract for mobile telephone services and its commencement.

The majority of T-Mobile customers only uses a mobile connection from T-Mobile and doesn't combine this with other services from T-Mobile.

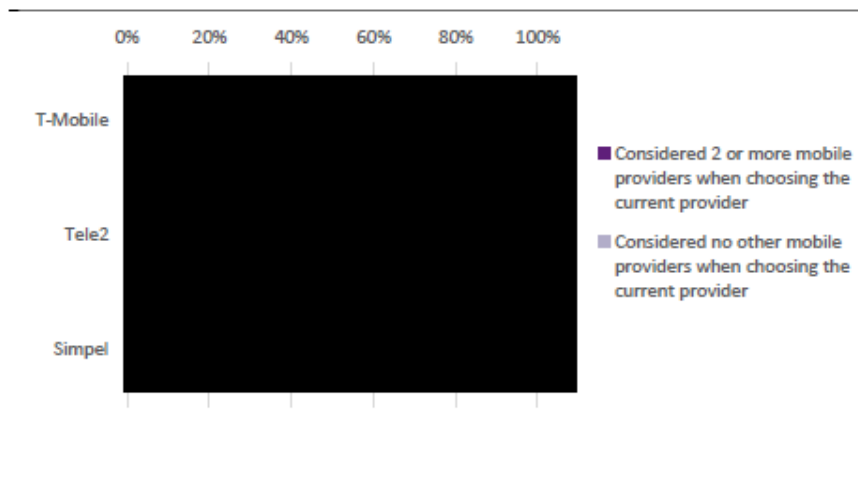
Table 7 Do you combine your mobile connection from T-Mobile with T-Mobile Thuis with interactive TV on the same address or do you use T-Mobile Samen or Alles onder 1 dak? (Question only posed to T-Mobile customers)

	T-Mobile
Yes, T-Mobile Thuis with interactive TV	[...]
Yes, T-Mobile Samen	[...]
Yes, Alles onder 1 dak	[...]
No, Only a mobile connection	[...]

Source: Panteia, 2018

Simpel's customers [...]. T-Mobile's customers have only considered T-Mobile most often.

Figure 1 When choosing your current mobile services provider have you considered other providers, or only your current provider?



Source: Panteia, 2018

Contracts for mobile services with Simpel are almost exclusively signed online on the provider's website. Contracts with T-Mobile are usually signed in T-Mobile store.

table 8 Where did you sign your current contract for mobile services?

	<i>T-Mobile</i>	<i>Tele2</i>	<i>Simpel</i>
In a store affiliated with the provider itself	[...]	[...]	[...]
In a third party store, for example a Mediamarkt or Phone House	[...]	[...]	[...]
Online via the provider's website	[...]	[...]	[...]
Online via a third party, for example Belsimpel, Phone House of Mediamarkt	[...]	[...]	[...]
By telephone via de mobiele provider	[...]	[...]	[...]
By telephphone via a third party, for example Mediamarkt of Phone House	[...]	[...]	[...]
Other	[...]	[...]	[...]

Source: Panteia, 2018

Price played a role in the decision for almost all customers of T-Mobile, Tele2 and Simpel, and relatively the biggest role for [...] customers. Other aspects that are often mentioned are the quality of the phone and the quality of the network of the provider.

table 9 Which of the following factors have played a role in the decision for your current contract/connection for mobile services. Multiple answers are possible.

	<i>T-Mobile</i>	<i>Tele2</i>	<i>Simpel</i>
Price in terms of costs and interchangeability of minutes, data usage and SMS	[...]	[...]	[...]
Network reliability and coverage	[...]	[...]	[...]
Network performance like internet speed	[...]	[...]	[...]
Customer service quality	[...]	[...]	[...]
Range and quality of the mobile phone	[...]	[...]	[...]
Reputation of the provider	[...]	[...]	[...]
Possibility to combine with other services the provider delivers	[...]	[...]	[...]
Other	[...]	[...]	[...]
None	[...]	[...]	[...]

Source: Panteia, 2018

With all providers customers indicate that price is the most important factor the most important factor in their decision. However, for [...] customers this percentage is considerably higher than for the other providers.

table 10 Which of these factors was the most important? One answer possible

	<i>T-Mobile</i>	<i>Tele2</i>	<i>Simpel</i>
Price in terms of costs and interchangeability of minutes, data usage and SMS	[...]	[...]	[...]
Network reliability and coverage	[...]	[...]	[...]
Network performance like internet speed	[...]	[...]	[...]
Customer service quality	[...]	[...]	[...]
Range and quality of the mobile phone	[...]	[...]	[...]
Reputation of the provider	[...]	[...]	[...]
Possibility to combine with other services the provider delivers	[...]	[...]	[...]
Other	[...]	[...]	[...]
None	[...]	[...]	[...]

Source: Panteia, 2018

3.2 Costs of usage and the effect of price ratio's on the choice for a provider

Most respondents monthly pay between 10 and 20 euros for their mobile connection/contract. With Simpel customers [...]. T-Mobile and Tele2 have large groups of customers that either pay between 20 and 30 or between 30 and 50 euros per month. These differences probably relate to the costs for mobile phones that are regularly included in the monthly payments for T-Mobile and Tele2 contracts. Simpel is mostly know for [...]. There has been made no distinction between both types of contracts in this study.

table 11 How much do you pay on average per month for your current contract for mobile services?

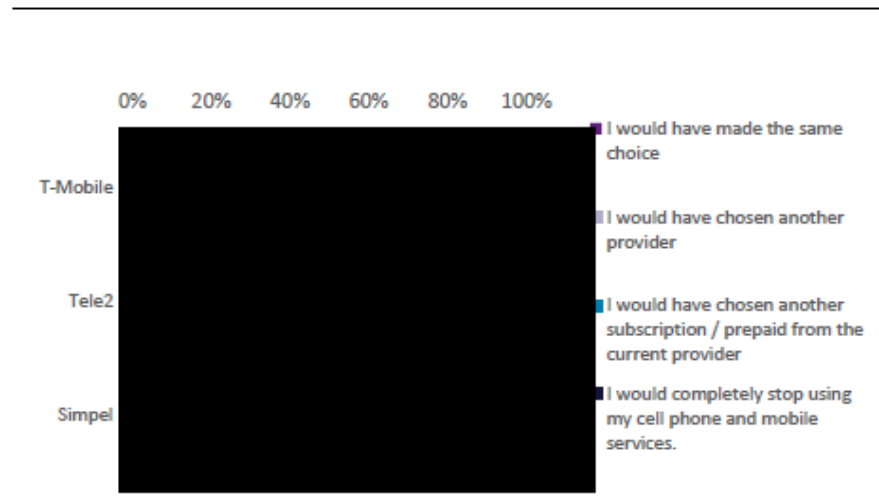
	<i>T-Mobile</i>	<i>Tele2</i>	<i>Simpel</i>
less than 5 euro per month	[...]	[...]	[...]
5 to 10 euro per month	[...]	[...]	[...]
10 to 20 euro per month	[...]	[...]	[...]
20 to 30 euro per month	[...]	[...]	[...]
30 to 50 euro per month	[...]	[...]	[...]
More than 50 euro per month	[...]	[...]	[...]
Don't know	[...]	[...]	[...]

Source: *Panteia, 2018*

The first question establishes the amount one pays per month for using their mobile phone. Subsequently it was asked whether one would still have chosen their current provider if the costs had been 10% higher on the signing date. For this question, the new amount was computed for the respondent, so that they did not have to do that themselves.

[...] % of T-Mobile customers indicates that they would have chosen another provider in that situation against [...] % of Tele2 customers and [...] % of Simpel customers.

figure 2 What if, at the time that you chose your current contract all products offered by your current provider, including yours, would have been 10% more expensive and prices of other providers would have stayed the same. What would you have done?



Source: Panteia, 2018

T-Mobile customers that combined a mobile connection with 'T-Mobile Thuis', 'T-Mobile Samen' or 'Alles onder 1 dak' and indicated to switch if prices T-Mobile's prices increased by 10% were asked the following question: *Do you know that by switching, you lose the advantages of 'T-Mobile Thuis', 'T-Mobile Samen' or 'Alles onder 1 dak'?* Practically all respondents indicated to know this.

table 12 Do you know that by switching, you lose the advantages of 'T-Mobile Thuis', 'T-Mobile Samen' or 'Alles onder 1 dak'?

	T-Mobile
Yes	[...]
No	[...]

Source: Panteia, 2018

From the few customers that indicate not to know this (see table), all indicated to realise it after the question was posed.

Of the respondents that indicated to switch providers if prices were 10% higher, more than half said not to know for which provider they would have chosen in that situation. Often respondents indicated that they would make a new price comparison between providers or to seek information from family or friends.

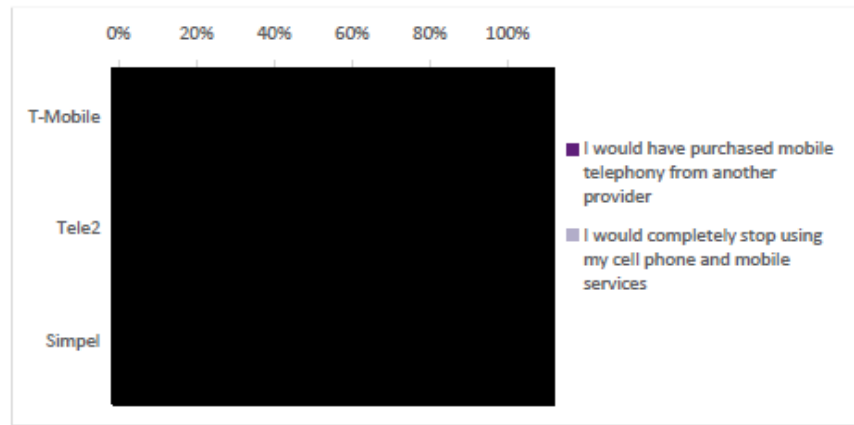
table 13 You indicated that if all products of your current provider had been 10% more expensive, you would have chosen for another provider. Which provider would you probably have chosen in that situation?

	<i>T-Mobile</i>	<i>Tele2</i>	<i>Simpel</i>
KPN	[...]	[...]	[...]
Telfort	[...]	[...]	[...]
Simyo	[...]	[...]	[...]
XS4ALL	[...]	[...]	[...]
Ortel Mobile	[...]	[...]	[...]
Solcon	[...]	[...]	[...]
YES	[...]	[...]	[...]
Vodafone/Ziggo	[...]	[...]	[...]
Hollandsnieuwe	[...]	[...]	[...]
T-Mobile NL	[...]	[...]	[...]
Thuis	[...]	[...]	[...]
Ben	[...]	[...]	[...]
KNIPPR	[...]	[...]	[...]
Simpel	[...]	[...]	[...]
TELE2	[...]	[...]	[...]
InterNL net	[...]	[...]	[...]
Lebara	[...]	[...]	[...]
Lycamobile	[...]	[...]	[...]
Youfone	[...]	[...]	[...]
Vectone	[...]	[...]	[...]
AH Mobile	[...]	[...]	[...]
I don't know yet, I would get more information first	[...]	[...]	[...]

Source: Panteia 2018

Almost all respondents indicate that they would have chosen for another provider in the case that their current provider would not have existed.

figure 3 What if you previously would not have been able to choose your current provider. What if your current provider would not exist. What would you probably have done?



Source: Panteia, 2018

In this case most respondents also do not indicate another provider for which they would have chosen. Most respondents indicated that they would make a new price comparison between providers or to seek information from family or friends.

table 14 You indicated that if, had you not been able to choose for your current provider you would have chosen another one. Which provider would you probably have chosen?

	<i>T-Mobile</i>	<i>Tele2</i>	<i>Simpel</i>
KPN	[...]	[...]	[...]
Telfort	[...]	[...]	[...]
Simyo	[...]	[...]	[...]
XS4ALL	[...]	[...]	[...]
Ortel Mobile	[...]	[...]	[...]
Solcon	[...]	[...]	[...]
YES	[...]	[...]	[...]
Vodafone/Ziggo	[...]	[...]	[...]
Hollandsenieuwe	[...]	[...]	[...]
T-Mobile NL	[...]	[...]	[...]
Thuis	[...]	[...]	[...]
Ben	[...]	[...]	[...]
KNIPPR	[...]	[...]	[...]
Simpel	[...]	[...]	[...]
TELE2	[...]	[...]	[...]
InterNL net	[...]	[...]	[...]
Lebara	[...]	[...]	[...]
Lycamobile	[...]	[...]	[...]
Youfone	[...]	[...]	[...]
Vectone	[...]	[...]	[...]
AH Mobile	[...]	[...]	[...]
Don't know, can not choose	[...]	[...]	[...]

Source: Panteia 2018

table 15 What sort of connection would you probably have chosen from this other provider
 What kind of connection would you probably have chosen from this other provider?

	<i>T-Mobile</i>	<i>Tele2</i>	<i>Simpel</i>
Pre-paid	[...]	[...]	[...]
Postpaid	[...]	[...]	[...]
Postpaid with other services like landline telephone or television services	[...]	[...]	[...]
Other	[...]	[...]	[...]

Source: Panteia, 2018

3.3 Miscellaneous Questions

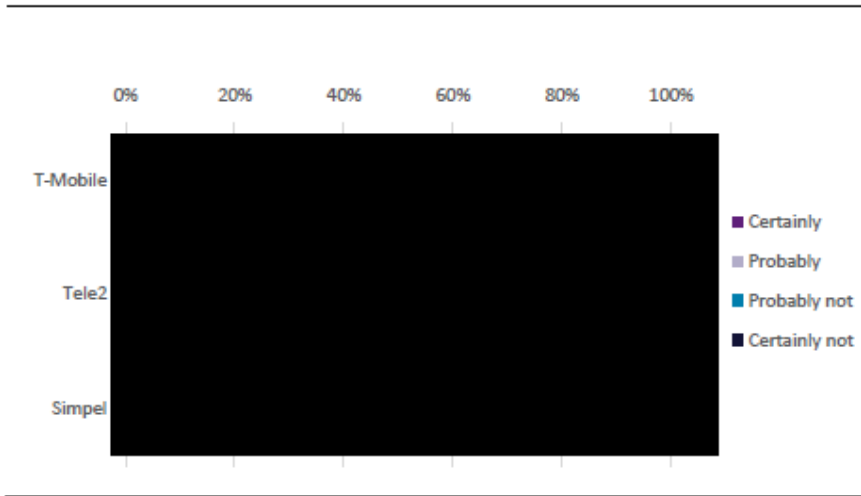
The questionnaire ended with two questions in which respondents were asked which provider they had before their current one and to what extent they expected to consider a contract that combined landline and mobile services in the future.

table 16 Which provider did you have before you had a contract with your current provider.

	<i>T-Mobile</i>	<i>Tele2</i>	<i>Simpel</i>
KPN	[...]	[...]	[...]
Telfort	[...]	[...]	[...]
Simyo	[...]	[...]	[...]
XS4ALL	[...]	[...]	[...]
Ortel Mobile	[...]	[...]	[...]
Solcon	[...]	[...]	[...]
YES	[...]	[...]	[...]
Vodafone/Ziggo	[...]	[...]	[...]
Hollandsnieuwe	[...]	[...]	[...]
T-Mobile NL	[...]	[...]	[...]
Thuis	[...]	[...]	[...]
Ben	[...]	[...]	[...]
KNIPPR	[...]	[...]	[...]
Simpel	[...]	[...]	[...]
TELE2	[...]	[...]	[...]
InterNL net	[...]	[...]	[...]
Lebara	[...]	[...]	[...]
Lycamobile	[...]	[...]	[...]
Youfone	[...]	[...]	[...]
Vectone	[...]	[...]	[...]
AH Mobile	[...]	[...]	[...]
None; current provider was the first provider for mobile services I had	[...]	[...]	[...]
Other	[...]	[...]	[...]

Source: Panteia, 2018

figure 4 A lot of providers offer contracts that combine landline and mobile services for a combined price per month. Do you expect to consider such a contract in future decisions regarding telecom providers?



Source: Panteia, 2018

Annexes

Annex 1: Questionnaire

Definitive Questionnaire

INTRODUCTION

Good [morning/afternoon/avond], you are speaking with [name interviewer] from research firm Panteia located in Zoetermeer.

At the moment we are conducting research commissioned by the Autoriteit Consument en Markt, ACM for short.

T-Mobile seeks to acquire Tele2. De European Commission investigates in cooperation with the ACM whether or not after such a merger there still is sufficient consumer choice. A short telephone survey of Tele2, T-Mobile and Simpel customers is part of the investigation.

Therefore, I would like to ask you a couple of questions about the mobile connection of your phone. This interview will take approximately 5 minutes. Is now convenient for you?

INSTRUCTION INTERVIEWER:

WHEN IN DOUBT, CHECK WHETHER THE PERSON ON THE OTHER END OF THE LINE IS THE MAIN USER OF THIS PHONE AND NOT FOR EXAMPLE HIS SON, DAUGHTER, FRIEND OR COLLEAGUE.

IF THE RESPONDENT ASKS: YOUR PHONE NUMBER HAS BEEN PROVIDED BY THE AUTORITEIT CONSUMENT EN MARKT. THEY HAVE RECEIVED YOUR NUMBER FROM YOUR PROVIDER WITH THE GOAL OF EXECUTING THIS RESEARCH. THE ANSWERS YOU GIVE DURING THE INTERVIEW WILL BE HANDLED CONFIDENTIALLY BY PANTEIA.

yes -> start conversation

no, different time -> make callback appointment

no, does not want to cooperate -> to non-response question

language problems -> closing text

IF REFUSAL:

Would you like to explain why you do not want to cooperate with this research?

1. no time / too busy
2. Not interested
3. Do not know anything about the subject, never choose a provider yourself
4. other namely (open)
5. do not know

1 Which provider of mobile services do you currently pay for the use of this mobile phone?

INSTRUCTION PROGRAMMER: SINGLE,

INSTRUCTION INTERVIEWER: READ OUT IF NECESSARY

ANSWER ALSO IF THIS MOBILE PHONE IS USED IN A MULTIPLAYER BUNDLE (FOR EXAMPLE A BUNDLE THAT ACCESSES A FIXED LINE AND A MOBILE PHONE)

KPN	1	to Q1.1 then CLOSE
Telfort	2	to Q1.1 then CLOSE
Simyo	3	to Q1.1 then CLOSE
XS4ALL	4	to Q1.1 then CLOSE
Ortel Mobile	5	to Q1.1 then CLOSE
Solcon	6	to Q1.1 then CLOSE
YES	7	to Q1.1 then CLOSE
Vodafone/Ziggo	8	to Q1.1 then CLOSE
Hollandsnieuwe	9	to Q1.1 then CLOSE
T-Mobile NL	10	CONTINUE to Q2
Thuis	11	CONTINUE to Q2
Ben	12	CONTINUE to Q2
KNIPPR	13	CONTINUE to Q2
Simpel	14	CONTINUE to Q2
TELE2	15	CONTINUE to Q2
InterNL net	16	CONTINUE to Q2
Lebara	17	to Q1.1 then CLOSE
Lycamobile	18	to Q1.1 then CLOSE
Youfone	19	to Q1.1 then CLOSE
Vectone	20	to Q1.1 then CLOSE
AH Mobile	21	to Q1.1 then CLOSE
[DO NOT READ OUT] Other (open)	22	to Q1.1 then CLOSE
[DO NOT READ OUT] Employer pays the bill	23	CLOSE
[DO NOT READ OUT] Don't know	24	CLOSE

Q 1.1 ASK IF Q1 ≠ 10 t/m 16 of 23, 24

- a. **So you pay [answer Q1] for the use of this mobile phone? Is that right?**

INSTRUCTION PROGRAMMER: SINGLE

INSTRUCTIE INTERVIEWER:

- 2 1. yes -> CLOSE -> Closing text
- 3 2. No -> Reset Q1, overwrite previous answer
- 4 3. do not know -> CLOSE -> Closing text

5 How do you pay for the use of this phone?

INSTRUCTION PROGRAMMER: SINGLE

INSTRUCTION INTERVIEWER: READ OUT IF NECESSARY

1. Pre-paid, you buy credit for calling, texting and / or internet in advance. This can be done online, at a vending machine or in the store.
2. I have a subscription or contract for which I pay monthly, usually via direct debit.
3. Other, namely (open) -> CLOSE -> Closing text
4. Do not know - CLOSE -> Closing text

6 Have you personally chosen [answer Q2: pre-paid / a subscription or contract] from [answer Q1] for this mobile connection or did someone choose another for you, for example a family member or acquaintance or your employer.

INSTRUCTION PROGRAMMER: SINGLE

INSTRUCTION INTERVIEWER:

1. Yes, I have chosen and concluded it myself, possibly with help or advice from others
2. No, a family member, friend or acquaintance has chosen and closed for me - CLOSE -> closing text
3. No, my employer has chosen and closed -> CLOSE -> closing text
4. do not know -> CLOSE -> closing text

7 Is this your main personal mobile phone?

INSTRUCTION PROGRAMMER: SINGLE

INSTRUCTION INTERVIEWER: THE MOST IMPORTANT TO SAY: MOST USED, OR ITS DEPENDENT. IF A RESPONDENT HAS MOORER CONNECTIONS ITSELF, PERSONALLY IN HUMAN BEINGS AND HE CAN NOT INDICATE WHETHER OR OTHER IS MOST IMPORTANT, CODE THAN ANSWER YES.

- 1 Yes
- 2 No – CLOSE -> closing text

Questions about Gender, Age and Region to be added. Exclusion follows if respondent is below 18 years of age.

Q 5 ASK IF Q1 = 10

8 Do you combine T-Mobile's mobile connection with T-Mobile Thuis with interactive TV at the same address or do you use T-Mobile Samen of van Alles onder 1 dak?

INSTRUCTION PROGRAMMER: SINGLE

INSTRUCTION INTERVIEWER:

- 1 Yes, T-Mobile at home with interactive TV,
The advantage consists of € 2.50 discount and free Fox Sports Eredivisie or Fox Sports Complete for € 5 per month
- 2 Yes, T-Mobile Together.
If you start a group together with others who also have a T-Mobile subscription, you can receive a maximum of 2 MB free data or € 5 discount per month
- 3 Yes, Everything under one roof.
If more people in one household have a mobile subscription with T-mobile, they can all get a discount of € 2.50 to a maximum of € 12.50 per month
- 4 No, only mobile subscription
- 5 do not know

Q 6.a Ask of new customers, on basis of file

9

- a. Have you considered other providers of mobile services when choosing your current provider of mobile telephony or have you only looked at one provider?**

INSTRUCTION PROGRAMMER: SINGLE

INSTRUCTION INTERVIEWER:

AT 'PROVIDER' WE MEAN THE NETWORK LICENSE WHERE YOU USE IT. AN OFFER MAY OFFER DIFFERENT BRANDS. WE ARE INTERESTED OR (TO YOUR OPINION) YOU HAVE TAKEN INTO ACCOUNT WITH A COMPLETE OTHER PROVIDER AND NOT ONLY ANOTHER BRAND FROM YOUR CURRENT PROVIDER.

1. I have considered a series (total 2 or more) of mobile providers
2. I have not considered any other mobile providers
3. Do not know

Q 6.b ASK OF INTERNAL SWITCHERS, ON BASIS OF FILE

- b. Have you considered other mobile providers when choosing or adjusting your current connection for mobile telephony or have you considered only one provider?**

INSTRUCTION PROGRAMMER: SINGLE

INSTRUCTION INTERVIEWER:

WITH 'PROVIDER' WE MEAN WHAT NET NETWORK PROVIDER YOU MAKE USE. AN OFFER MAY OFFER DIFFERENT BRANDS. WE ARE INTERESTED OR (ACCORDING TO YOUR OPINION) YOU HAVE CONSIDERED A COMPLETELY DIFFERENT PROVIDER, NOT ONLY ANOTHER BRAND FROM YOUR CURRENT PROVIDER.

1. I have considered a range of (total 2 or more) mobile providers
2. I have not considered any other mobile providers
3. Do not know

Q 7.a ASK OF NEW CUSTOMERS (ON BASIS OF FILE)

10

- a. Where did you close your current [answer Q2: PRE-PAID / SUBSCRIPTION OR CONTRACT] of [answer Q1]?**

Q 7.b ASK OF INTERNAL SWITCHERS (ON BASIS OF FILE)

- b. When you last chose or upgraded your current mobile phone contract / connection, where did you do that?**

**INSTRUCTION PROGRAMMER: SINGLE,
INSTRUCTION INTERVIEWER: READ OUT IF NECESSARY**

1. In the store of the mobile provider itself
2. In store at a third party, for example Mediamarkt or Phone House
3. Online via the mobile provider
4. Online via a third party, for example Belsimpel, Phone House or Mediamarkt
5. By telephone via the mobile provider
6. By telephone via a third party, for example Mediamarkt or Phone House
7. Other namely (open)
8. do not know

11 Which of the following factors have influenced the choice of your current [answer Q2: PRE-PAID / SUBSCRIPTION OR CONTRACT] or [answer Q1]?

**INSTRUCTION PROGRAMMER: MULTIPLE, ANSWERS RANDOM OFFERING
INSTRUCTION INTERVIEWER: ANSWERS ONE FOR ONE READ OUT; ASK FOR EACH ITEM WHETHER IT HAS BEEN INFLUENCED. CODE ANSWER IF YES**

1. The price in terms of costs and fees of minutes, data usage and SMS)
2. Network reliability and coverage
3. Network performance such as speed
4. Quality of customer service
5. Range and quality of mobile device
6. Network provider has a good reputation
7. Possibility to combine to a bundle with fixed telephony, internet and / or TV
8. [NOT RANDOM, as last item] have there been other factors that I have not yet mentioned? If so, which [OPEN]
9. [DO NOT READ OUT, NOT RANDOM] none
10. [DO NOT READ OUT, NOT RANDOM] do not know

Q 8.a ASK IF RESPONDENT GIVES MULTIPLE ANSWERS FOR Q8

- a. Which of these factors was the most important in making the decision?

**INSTRUCTION PROGRAMMER: SINGLE
INSTRUCTION INTERVIEWER: READ ANSWERS**

1 <answers list Q8 - show the answers listed in Q8>
2 do not know

Q 9.a TO CUSTOMERS WITH A CONTRACT [Q2 = 2]

12

- b. How much do you approximately pay on average per month for your current mobile services contract? ?

Q 9.b ASK OF PRE PAID CUSTOMERS [Q2 = 1]

- c. At which amount do you value your prepaid usage in a regular month?

**INSTRUCTION PROGRAMMER: SINGLE
INSTRUCTION INTERVIEWER:**

IF THE RESPONDENT NAMES AN AMOUNT ON HIS/HER OWN OR GIVES A CONCRETE ESTIMATE (THEREFORE NO RANGE: BETWEEN X AND Y), CODE THAN ANSWER 1 AND COMPLETE THE AMOUNT.
IF THE RESPONDENT DOES NOT KNOW (FOR SURE), ASK HIM / HER FOR AN ESTIMATION, CODE ANSWER 2 AND FILL THEN THE AMOUNT.
IF THE RESPONDENT CAN NOT OR DOES NOT NAME AN AMOUNT OR ESTIMATION, CODE ANSWER 3

1 respondent mentions an amount: [enter the amount, in whole euros]
2 respondent makes an estimate: [enter the amount, in whole euros]
3 respondent does not know

Q 9.c ASK OF NEW CUSTOMERS WHO ANSWERED '3' for Q9.b

- d. / Q 9.4 I understand it is hard for you to estimate monthly costs for your services plan. If I name some price categories, which of these is the category in which the amount you pay is situated?

**INSTRUCTION PROGRAMMER: SINGLE
INSTRUCTION INTERVIEWER: READ ANSWERS**

1. less than 5 euros per month
2. 5 to 10 euros per month
3. 10 to 20 euros per month
4. 20 to 30 per month
5. 30 to 50 per month
6. More than 50 euros per month
7. [DO NOT READ OUT] really do not know

**Q 10.a ASK OF CUSTOMERS WITH A CONTRACT[Q2 = 2]
AND ANSWER Q9.3/Q9.4 IS NOT REALLY DON'T KNOW**

- e. You have previously indicated that you currently have a subscription or contract of [answer Q1].

Suppose that at the time that you chose this contract, all subscriptions of [answer Q1], including yours, were 10% more expensive per month - that is, you would have to pay approximately [amount A] euro per month instead of the [amount B] euro you paid about a month, while the prices of all other mobile phone providers remained unchanged.

What would you have done?

**Q 10.b ASK OF CUSTOMERS WITH A CONTRACT[Q2 = 2]
AND ANSWER Q9.3/Q9.4 IS NOT REALLY DON'T KNOW**

- f. You have previously indicated that you currently have pre-paid from [answer Q1].

Suppose that at the time you chose this plan, all pre-paid packages of [answer Q1] including yours were 10% more expensive for all elements such as example call minutes, data / MBs, SMS, etc. - that is, the top-up would cost you about [amount A] per month in case of constant use instead of the [amount B] that you now pay about a month for topping up, while the prices of all other mobile phone providers remained unchanged.

What would you have done?

INSTRUCTION PROGRAMMER: SINGLE
INSTRUCTION INTERVIEWER: READ ANSWERS

1. I would have made the same choice, ie a [answer Q2: pre paid / subscription] of [answer Q1]
2. I would have chosen another provider / provider
3. I would have chosen a [PRE-PAID / CONTRACT (opposite of answer to Q2) of [answer Q1]
4. I would completely stop using my mobile phone and mobile services.
[NOT IN RANDOMATION]

5. Do not know [DO NOT COME IN RANDOMIZATION, DO NOT READ OUT]

Instruction for setting amount A and amount B

If question 9.1 / 9.2 is answer 1 or 2: one mentions a concrete amount:

amount A = amount B x 110%

amount B = answer to question 9.1 / 9.2

If question 9.1 / 9.2 is answer 3: men do not know and are asked for a craze

see the table below

		Amount B	Amount A
1.	less than 5 euro per month	= 2,50	2,75
2.	5 to 10 euro per month	= 7,50	8,25
3.	10 to 20 euro per month	= 15	16,50
4.	20 to 30 per month	= 25	27,50
5.	30 to 50 per month	= 40	44
6.	More Than 50 euro per month	= more than 50	more than 55

Q 10.c ASK WHEN QUADPLAY CUSTOMER IS: Q5 = 1, 2 OR 3 AND IF YOU CHOOSE TO TRANSFER TO ANOTHER PROVIDER [Q 10.1 / 10.2 = 2 OR 4]

g. Are you aware that you are losing the benefits of [answer Q5] to [answer Q1]?

**INSTRUCTIE PROGRAMMEUR: SINGLE
INSTRUCTIE INTERVIEWER:**

- 1 Yes
- 2 No
- 3 Do not know

Q 10.d AKS IF 10.3 = 2 or 3

h. Would you, with this knowledge, make another decision?

**INSTRUCTION PROGRAMMER: SINGLE
INTERVIEWER INSTRUCTIONS: WITH ANOTHER CHOICE WE MEAN THE PREVIOUS DESCRIPTION WITH A 10% INCREASE IN COSTS.**

1 Yes -> reset Q 10.1 / 10.2 (do NOT overwrite answer, save old reply and new answer both) -> then to Q 11

2 No.

3 Do not know

Q 11 ASK IF Q 10 = 1, 3 of 5, ALL THAT WOULD STAY WITH CURRENT PROVIDER OR DON'T KNOW

- 12 **Now suppose you could not have chosen Tele2 the last time. Suppose that Tele2 does not exist anymore. You would then have to make another choice. What would you probably have done then?**

INSTRUCTION PROGRAMMER: SINGLE

INSTRUCTION INTERVIEWER: READ ANSWERS

1. I would have purchased mobile telephony from another provider
2. I would completely stop using my cell phone and mobile services
3. [DO NOT READ OUT] Do not know

Q 12 and Q13 ASK IF Q 10 = 2 or Q 11 = 1 ALL THAT WOULD TRANSFER

- 13 Which provider would you probably have chosen?**

PROGRAMMER INSTRUCTION: SINGLE, ANSWER Q1 OFFCLOSE

INSTRUCTION INTERVIEWER: REPLACE READINGS IF NECESSARY

IF IT IS UNSURE OR DOES NOT KNOW, ASK: IF YOU SHOULD CHOOSE ONE, WHO WOULD YOU HAVE CHOSENALLY CHOSEN?

1. Answers Q1

- 14 What kind of connection would you probably have chosen from [answer Q12]?**

INSTRUCTION PROGRAMMER: SINGLE

INSTRUCTION INTERVIEWER: READ ANSWERS

1. Prepaid (NOT READ: you buy credit for calling, texting and internet)
2. Subscription (NOT READ: you pay monthly, usually via direct debit)
3. A subscription for a bundle of mobile and fixed telephony / internet and / or TV
4. [DO NOT READ OUT] other namely (open)
5. [DO NOT READ OUT] do not know

- 15 Which provider did you have before you closed a mobile connection with [answer Q1]?**

PROGRAMMER INSTRUCTION: SINGLE, ANSWER Q1 OFFCLOSE

INSTRUCTION INTERVIEWER: REPLACE READINGS IF NECESSARY

IF IT IS UNSURE OR DOES NOT KNOW, ASK: IF YOU SHOULD CHOOSE ONE, WHO WOULD YOU HAVE CHOSENALLY CHOSEN?

1. Answers Q1

16 With many providers, you can now opt for a bundle that provides access to a fixed line (eg TV and internet) and a mobile phone for a fixed amount per month. Do you expect to see such bundles in your future purchase decisions?

PROGRAMMER INSTRUCTION: SINGLE, ANSWER Q1 OFFCLOSE

INSTRUCTION INTERVIEWER: READ ANSWERS

1. Certainly
2. probably
3. probably not
4. Certainly not
5. [DO NOT READ OUT] I do not know

Move background questions after Q4

[Display] We are almost at the end of this interview. Finally, I would like to ask you three background questions for statistics

17 CODE SEX, DON'T ASK:

INSTRUCTIE PROGRAMMEUR: SINGLE

INSTRUCTIE INTERVIEWER:

1. Male
2. Female
3. Other

18 In which province do you live?

INSTRUCTIE PROGRAMMEUR: SINGLE

INSTRUCTIE INTERVIEWER:

- 1 Groningen
- 2 Friesland
- 3 Drenthe
- 4 Overijssel
- 5 Gelderland
- 6 Noord-Holland
- 7 Zuid-Holland
- 8 Flevoland
- 9 Utrecht
- 10 Zeeland
- 11 Brabant
- 12 Limburg
- 13 Woont niet in Nederland
- 14 Weet niet

19 And finally, what is your age?

INSTRUCTION PROGRAMMEUR: QUANTITY

INSTRUCTION INTERVIEWER:

1. Write down age in years [x] -> if <18 years -> closing text
2. do not know

END: These were my questions to you. I want to thank you very much for your answers and your time. I wish you a pleasant [day / evening].

Closing text: you do not belong to the target group of this telephone survey. I want to thank you warmly for your willingness to participate. I wish you a pleasant [day / evening].

Annex 2: Detailed Response Overview

	<i>Simpel</i>		Tele2				Tmobile			
	Postpaid		Postpaid		Prepaid		Postpaid		Prepaid	
	Gross add	Internal switcher	Gross add	Internal switcher	Gross add	Internal switcher	Gross add	Internal switcher	Gross add	Internal switcher
Gross sample received	4.000	8.000	10.500	10.500	4.500	4.500	10.500	10.500	4.500	4.500
Spare / not used	1 999	3 917	9.219	5 065	0	2.162	5 249	5.246	0	0
Not used (tel. number already exists)	11	158	1	21	0	50	2	7	2	11
Opt out (screened out on research conditions)	15	4	0	7	1	7	2	5	1	15
No telephone number	0	1	0	0	0	0	0	0	0	0
Not used (no contact attempts)	0	2 203	321	2 552	1 989	826	853	3.192	102	452
Unreachable (less than 5 contact attempts, quota full)	1 370	1.113	739	1 311	238	614	1.449	791	1.344	1.065
Unreachable (5 contact attempts, not used anymore)	0	0	0	330	1 283	223	351	269	2.052	1.325
Used sample	605	604	220	1.214	989	618	2.594	990	999	1.632
Technical non-response	69	50	64	127	727	77	1 963	170	491	664
Non-response	183	193	22	357	57	164	239	305	125	259
Screen out, during interview	100	103	33	105	133	82	135	58	235	389
Cleaned, during reporting	3	3	0	10	10	23	7	3	0	9
Successful (* including extra sample (see § 2.8))	250	251	101	655	62	272	250	454	148*	311*
Used sample	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Technical non-response	11%	8%	29%	10%	74%	12%	76%	17%	49%	41%
Non-response	30%	32%	10%	29%	6%	27%	9%	31%	13%	16%
Screen out, during interview	17%	17%	15%	9%	13%	13%	5%	6%	24%	24%
Cleaned, during reporting	0%	0%	0%	1%	1%	4%	0%	0%	0%	1%
Successful: target group	41%	42%	46%	54%	6%	44%	10%	46%	15%	19%
Details Screen out during interview and cleaning during reporting	103	110	33	115	143	105	142	61	235	398
Screener, subscription via employer/don't know provider	2	0	0	2	1	2	1	0	3	18
Screener, other provider (Q1)	3	4	0	9	3	15	15	4	2	60
Screener, no subscription and no prepaid (Q2)	0	0	0	0	0	0	2	1	2	1
Screener, somebody else chose for prepaid/abonnement (Q3)	79	84	19	73	60	14	99	43	146	50
Screener, not most important telephone (Q4)	6	7	5	10	22	11	8	4	41	26
Screener, quatum full	3	1	0	0	0	1	0	0	0	6
Screener, younger than 18	7	7	3	7	3	0	8	3	20	5
Screener, don't want to tell age	0	0	0	0	1	0	0	0	0	2
Screener, other provider (Q1) than according to sample	0	0	5	4	25	32	2	3	21	221
Screener, other payment (Q2) than according to sample	0	0	1	0	18	7	0	0	0	0
Cleaning complete interview: other provider	0	4	0	4	0	0	2	0	0	0
Cleaned: Provider correct, yet prepaid instead of postpaid	3	3	0	5	0	0	5	2	0	0
Cleaned: other provider and prepaid instead of postpaid	0	0	0	1	0	0	0	1	0	0
Cleaned: Provider correct, yet postpaid instead of prepaid	0	0	0	0	8	15	0	0	0	0
Cleaned: other provider and postpaid instead of prepaid	0	0	0	0	2	8	0	0	0	9
Details technical non-response	69	50	64	127	727	77	1.963	170	491	664
Unreachable	5	6	2	14	10	19	22	44	12	35
Language issues / no Dutch	33	10	13	36	14	6	109	56	97	116
No household (but company/foundation etc.)	0	1	0	0	2	0	0	2	5	2
Closed telephone number	31	33	49	77	701	52	1 832	68	377	511
Details non-response	183	193	22	357	57	164	239	305	125	259
Refusal no reason	23	31	4	57	11	30	43	48	21	50
Refusal no time / not up to participate	139	132	12	251	32	114	167	216	75	164
Refusal for specific reasons (principles)	15	21	2	37	6	14	18	28	15	27
Refusal during interview	2	5	4	9	3	2	4	6	1	9
Refusal because of health issues	3	4	0	1	4	4	6	5	13	4
Refusal other reasons	0	0	0	0	0	0	0	0	0	4
Refusal by telephone	1	0	0	2	1	0	1	2	0	1

Annex 3: T-Mobile Prepaid Analysis

	According to sample file: provider	prepaid prepaid n=286	prepaid postpaid n=173	postpaid postpaid n=704
Subscribed where?	In the store of the provider	■	■	■
	In the store of a third party, for example Mediamarkt, PH STORE	■	■	■
	Online via provider	■	■	■
	Online via third party, bijvoorbeeld Belsimpel, PH, MM ONLINE	■	■	■
	By telephone via provider	■	■	■
	By telephone via a third party, for example Mediamarkt of PH BY TELEPHONE	■	■	■
	Else	■	■	■
Total		100%	100%	100%
Reach and quality of mobile device	no	■	■	■
	yes	■	■	■
	don't know	■	■	■
Total		100%	100%	100%
Network of provider has a good reputation	no	■	■	■
	yes	■	■	■
	don't know	■	■	■
Total		100%	100%	100%
Possibility to combine with a package of landline, internet and TV	no	■	■	■
	yes	■	■	■
	don't know	■	■	■
Total		100%	100%	100%
What type of connection would you probably have chosen	Prepaid	■	■	■
	Postpaid	■	■	■
	A subscription for a total package of mobile and landline/internet and/or TV	■	■	■
	Else	■	■	■
Total		100%	100%	100%
Age category	18-24	■	■	■
	25-34	■	■	■
	35-44	■	■	■
	45-54	■	■	■
	55-64	■	■	■
	65+	■	■	■
Total		100%	100%	100%
Monthly costs	less than 5 euro per month	■	■	■
	5 to 10 euro per month	■	■	■
	10 to 20 euro per month	■	■	■
	20 to 30 euro per month	■	■	■
	30 to 50 euro per month	■	■	■
	More than 50 euro per month	■	■	■
	don't know	■	■	■
Total		100%	100%	100%

Annex 4: Unweighted sample size to background characteristics

table 17 Unweighted sample size gross add / internal switcher per provider

	<i>Gross adds</i>	<i>Internal switcher</i>
T-Mobile	[...]	[...]
Tele2	[...]	[...]
Simpel	[...]	[...]

Source: Panteia, 2018

table 18 Unweighted sample size postpaid / prepaid per provider

	<i>Postpaid</i>	<i>Prepaid</i>
T-Mobile	[...]	[...]
Tele2	[...]	[...]
Simpel	[...]	[...]

Source: Panteia, 2018

table 19 Unweighted sample size to sex per provider

	<i>Male</i>	<i>Female</i>
T-Mobile	[...]	[...]
Tele2	[...]	[...]
Simpel	[...]	[...]

Source: Panteia, 2018

table 20 Unweighted sample size to age per provider

	18-24	25-34	35-44	45-54	55-64	65+
T-Mobile	[...]	[...]	[...]	[...]	[...]	[...]
Tele2	[...]	[...]	[...]	[...]	[...]	[...]
Simpel	[...]	[...]	[...]	[...]	[...]	[...]

Source: Panteia, 2018

Annex 5: Disaggregated tables

Annex 5.1 Disaggregated according to switch type

table 21 Do you combine the mobile connection from T-Mobile with T-Mobile Thuis with interactive TV on the same address or do you use T-Mobile Samen or Alles onder 1 dak? (question only posed to T-Mobile customers)

	<i>T-Mobile</i>	
	<i>Gross adds</i>	<i>Internal switcher</i>
Yes, T-Mobile thuis with interactive TV	[...]	[...]
Yes, T-Mobile Samen	[...]	[...]
Yes, Alles onder 1 dak	[...]	[...]
No, only mobile Contract	[...]	[...]

Source: Panteia, 2018

figure 5 When choosing your current provider of mobile services, did you consider more than one provider?



Source: Panteia, 2018

figure 6 When choosing your current provider of mobile services, did you consider more than one provider?



Source: Panteia, 2018

figure 7 When choosing your current provider of mobile services, did you consider more than one provider?



Source: Panteia, 2018

table 22 When you last chose a contract or connection for mobile services, where did you do this?

<i>T-Mobile</i>		
	<i>Gross adds</i>	<i>Internal switchers</i>
In a store operated by the provider itself	[...]	[...]
In a store operated by a third party, for example Mediamarkt of Phone House	[...]	[...]
Online via the provider's website	[...]	[...]
Online via a third party, for example Belsimpel, Phone House of Mediamarkt	[...]	[...]
Telefonisch via de mobiele provider	[...]	[...]
By telephone via a third party, for example Mediamarkt of Phone House	[...]	[...]
Other	[...]	[...]

Source: Panteia, 2018

table 23 When you last chose a contract or connection for mobile services, where did you do this?

<i>Tele2</i>		
	<i>Gross adds</i>	<i>Internal switchers</i>
In a store operated by the provider itself	[...]	[...]
In a store operated by a third party, for example Mediamarkt of Phone House	[...]	[...]
Online via the provider's website	[...]	[...]
Online via a third party, for example Belsimpel, Phone House of Mediamarkt	[...]	[...]
By telephone contact with mobile provider	[...]	[...]
By telephone via a third party, for example Mediamarkt of Phone House	[...]	[...]
Other	[...]	[...]

Source: Panteia, 2018

table 24 Toen u voor het laatst uw huidige contract/ aansluiting voor mobiele telefonie heeft gekozen, waar heeft u dat toen gedaan?

	<i>Simpel</i>	
	<i>Gross adds</i>	<i>Internal switchers</i>
In a store operated by the provider itself	[...]	[...]
In a store operated by a third party, for example Mediamarkt of Phone House	[...]	[...]
Online via the provider's website	[...]	[...]
Online via a third party, for example Belsimpel, Phone House of Mediamarkt	[...]	[...]
By telephone contact with mobile provider	[...]	[...]
By telephone via a third party, for example Mediamarkt of Phone House	[...]	[...]
Other	[...]	[...]

Source: Panteia, 2018

table 25 Which of the following factors have been of influence in the decision for your current contract/connection? Multiple answers possible.

	<i>T-Mobile</i>	
	<i>Gross adds</i>	<i>Internal switchers</i>
The price in terms of costs and interchangeability of call minutes, data and sms	[...]	[...]
Reliability and coverage of the network	[...]	[...]
Network performance, e.g. speed	[...]	[...]
Quality of customer service	[...]	[...]
Range and quality of the mobile device	[...]	[...]
Provider has a good reputation	[...]	[...]
Possibility to combine with a package that includes landline services, internet and/or TV	[...]	[...]
Other	[...]	[...]
None	[...]	[...]

Source: Panteia, 2018

table 26 Which of the following factors have been of influence in the decision for your current contract/connection? Multiple answers possible.

	<i>Tele2</i>	
	<i>Gross adds</i>	<i>Internal switchers</i>
The price in terms of costs and interchangeability of call minutes, data and sms	[...]	[...]
Reliability and coverage of the network	[...]	[...]
Network performance, e.g. speed	[...]	[...]
Quality of customer service	[...]	[...]
Range and quality of the mobile device	[...]	[...]
Provider has a good reputation	[...]	[...]
Possibility to combine with a package that includes landline services, internet and/or TV	[...]	[...]
Other	[...]	[...]
None	[...]	[...]

Source: Panteia, 2018

table 27 Which of the following factors have been of influence in the decision for your current contract/connection? Multiple answers possible.

	<i>Simpel</i>	
	<i>Gross adds</i>	<i>Internal switchers</i>
The price in terms of costs and interchangeability of call minutes, data and sms	[...]	[...]
Reliability and coverage of the network	[...]	[...]
Network performance, e.g. speed	[...]	[...]
Quality of customer service	[...]	[...]
Range and quality of the mobile device	[...]	[...]
Provider has a good reputation	[...]	[...]
Possibility to combine with a package that includes landline services, internet and/or TV	[...]	[...]
Other	[...]	[...]
None	[...]	[...]

Source: Panteia, 2018

table 28 Which of these factors was most important in making your decision?

	<i>T-Mobile</i>	
	<i>Gross adds</i>	<i>Internal switchers</i>
The price in terms of costs and interchangeability of call minutes, data and sms	[...]	[...]
Reliability and coverage of the network	[...]	[...]
Network performance, e.g. speed	[...]	[...]
Quality of customer service	[...]	[...]
Range and quality of the mobile device	[...]	[...]
Provider has a good reputation	[...]	[...]
Possibility to combine with a package that includes landline services, internet and/or TV	[...]	[...]
None	[...]	[...]
Other factors	[...]	[...]

Source: Panteia, 2018

table 29 Which of these factors was most important in making your decision?

	<i>Tele2</i>	
	<i>Gross adds</i>	<i>Internal switchers</i>
The price in terms of costs and interchangeability of call minutes, data and sms	[...]	[...]
Reliability and coverage of the network	[...]	[...]
Network performance, e.g. speed	[...]	[...]
Quality of customer service	[...]	[...]
Range and quality of the mobile device	[...]	[...]
Provider has a good reputation	[...]	[...]
Possibility to combine with a package that includes landline services, internet and/or TV	[...]	[...]
None	[...]	[...]
Other factors	[...]	[...]

Source: *Panteia, 2018*

table 30 Which of these factors was most important in making your decision?

	<i>Simpel</i>	
	<i>Gross adds</i>	<i>Internal switchers</i>
The price in terms of costs and interchangeability of call minutes, data and sms	[...]	[...]
Reliability and coverage of the network	[...]	[...]
Network performance, e.g. speed	[...]	[...]
Quality of customer service	[...]	[...]
Range and quality of the mobile device	[...]	[...]
Provider has a good reputation	[...]	[...]
Possibility to combine with a package that includes landline services, internet and/or TV	[...]	[...]
None	[...]	[...]
Other factors	[...]	[...]

Source: Panteia, 2018

table 31 How much do you approximately pay on average per month for your current mobile services contract?

	<i>T-Mobile</i>	
	<i>Gross adds</i>	<i>Internal switchers</i>
less than 5 euro per month	[...]	[...]
5 to 10 euro per month	[...]	[...]
10 to 20 euro per month	[...]	[...]
20 to 30 euro per month	[...]	[...]
30 to 50 euro per month	[...]	[...]
More than 50 euro per month	[...]	[...]

Source: Panteia, 2018

table 32 How much do you approximately pay on average per month for your current mobile services contract?

<i>Tele2</i>		
	<i>Gross adds</i>	<i>Internal switchers</i>
less than 5 euro per month	[...]	[...]
5 to 10 euro per month	[...]	[...]
10 to 20 euro per month	[...]	[...]
20 to 30 euro per month	[...]	[...]
30 to 50 euro per month	[...]	[...]
More than 50 euro per month	[...]	[...]

Source: Panteia, 2018

table 33 How much do you approximately pay on average per month for your current mobile services contract?

<i>Simpel</i>		
	<i>Gross adds</i>	<i>Internal switchers</i>
less than 5 euro per month	[...]	[...]
5 to 10 euro per month	[...]	[...]
10 to 20 euro per month	[...]	[...]
20 to 30 euro per month	[...]	[...]
30 to 50 euro per month	[...]	[...]
More than 50 euro per month	[...]	[...]

Source: Panteia, 2018

figure 8 What if, when choosing your current contract all prepaid and postpaid packages of your current provider including yours were 10% more expensive, while prices of other providers remained unchanged. What would you have done?

[...]

Source: Panteia, 2018

figure 9 What if, when choosing your current contract all prepaid and postpaid packages of your current provider including yours were 10% more expensive, while prices of other providers remained unchanged. What would you have done?

[...]

Source: Panteia, 2018

figure 10 What if, when choosing your current contract all prepaid and postpaid packages of your current provider including yours were 10% more expensive, while prices of other providers remained unchanged. What would you have done?

[...]

Source: Panteia, 2018

figure 11 Suppose that the last time you chose a provider, you could not have chosen your current provider. What if your current provider did not exist. What would you probably have done?

[...] *Source: Panteia, 2018*

figure 12 Suppose that the last time you chose a provider, you could not have chosen your current provider. What if your current provider did not exist. What would you probably have done?

[...] *Source: Panteia, 2018*

figure 13 Suppose that the last time you chose a provider, you could not have chosen your current provider. What if your current provider did not exist. What would you probably have done?

[...] *Source: Panteia, 2018*

table 34 You indicated that if you had not been able to choose for your current provider, you would have chosen for another one. Which provider would you have chosen?

	<i>T-Mobile</i>	
	<i>Gross adds</i>	<i>Internal switchers</i>
KPN	[...]%	[...]%
Telfort	[...]%	[...]%
Simyo	[...]%	[...]%
XS4ALL	[...]%	[...]%
Ortel Mobile	[...]%	[...]%
Solcon	[...]%	[...]%
YES	[...]%	[...]%
Vodafone/Ziggo	[...]%	[...]%
Hollandsenieuwe	[...]%	[...]%
T-Mobile NL	[...]%	[...]%
Thuis	[...]%	[...]%
Ben	[...]%	[...]%
KNIPPR	[...]%	[...]%
Simpel	[...]%	[...]%
TELE2	[...]%	[...]%
InterNL net	[...]%	[...]%
Lebara	[...]%	[...]%
Lycamobile	[...]%	[...]%
Youfone	[...]%	[...]%
Vectone	[...]%	[...]%
AH Mobile	[...]%	[...]%
Don't know yet, I would first try to get new information	[...]%	[...]%

Source: Panteia, 2018

table 35 You indicated that if you had not been able to choose for your current provider, you would have chosen for another one. Which provider would you have chosen?

	<i>Tele2</i>	
	<i>Gross adds</i>	<i>Internal switchers</i>
KPN	[...]%	[...]%
Telfort	[...]%	[...]%
Simyo	[...]%	[...]%
XS4ALL	[...]%	[...]%
Ortel Mobile	[...]%	[...]%
Solcon	[...]%	[...]%
YES	[...]%	[...]%
Vodafone/Ziggo	[...]%	[...]%
Hollandsenieuwe	[...]%	[...]%
T-Mobile NL	[...]%	[...]%
Thuis	[...]%	[...]%
Ben	[...]%	[...]%
KNIPPR	[...]%	[...]%
Simpel	[...]%	[...]%
TELE2	[...]%	[...]%
InterNL net	[...]%	[...]%
Lebara	[...]%	[...]%
Lycamobile	[...]%	[...]%
Youfone	[...]%	[...]%
Vectone	[...]%	[...]%
AH Mobile	[...]%	[...]%
Don't know yet, I would first try to get new information	[...]%	[...]%

Source: Panteia, 2018

table 36 You indicated that if you had not been able to choose for your current provider, you would have chosen for another one. Which provider would you have chosen?

	<i>Simpel</i>	
	<i>Gross adds</i>	<i>Internal switchers</i>
KPN	[...]%	[...]%
Telfort	[...]%	[...]%
Simyo	[...]%	[...]%
XS4ALL	[...]%	[...]%
Ortel Mobile	[...]%	[...]%
Solcon	[...]%	[...]%
YES	[...]%	[...]%
Vodafone/Ziggo	[...]%	[...]%
Hollandsenieuwe	[...]%	[...]%
T-Mobile NL	[...]%	[...]%
Thuis	[...]%	[...]%
Ben	[...]%	[...]%
KNIPPR	[...]%	[...]%
Simpel	[...]%	[...]%
TELE2	[...]%	[...]%
InterNL net	[...]%	[...]%
Lebara	[...]%	[...]%
Lycamobile	[...]%	[...]%
Youfone	[...]%	[...]%
Vectone	[...]%	[...]%
AH Mobile	[...]%	[...]%
Don't know yet, I would first try to get new information	[...]%	[...]%

Source: Panteia, 2018

table 37 What sort of connection would you probably have chosen from this other provider

<i>T-Mobile</i>		
	<i>Gross adds</i>	<i>Internal switchers</i>
Prepaid	[...]%	[...]%
Contract	[...]%	[...]%
A contract for a combination of mobile and landline telecommunications and/or internet and/or tv	[...]%	[...]%
Other	[...]%	[...]%

Source: Panteia, 2018

table 38 What sort of connection would you probably have chosen from this other provider

<i>Tele2</i>		
	<i>Gross adds</i>	<i>Internal switchers</i>
Prepaid	[...]%	[...]%
Contract	[...]%	[...]%
A contract for a combination of mobile and landline telecommunications and/or internet and/or tv	[...]%	[...]%
Other	[...]%	[...]%

Source: Panteia, 2018

table 39 What sort of connection would you probably have chosen from this other provider

<i>Simpel</i>		
	<i>Gross adds</i>	<i>Internal switchers</i>
Prepaid	[...]%	[...]%
Contract	[...]%	[...]%
A contract for a combination of mobile and landline telecommunications and/or internet and/or tv	[...]%	[...]%
Other	[...]%	[...]%

Source: Panteia, 2018

table 40 Which provider did you have before you had your contract/connection with your current provider

	<i>T-Mobile</i>	
	<i>Gross adds</i>	<i>Internal switchers</i>
KPN	[...]%	[...]%
Telfort	[...]%	[...]%
Simyo	[...]%	[...]%
XS4ALL	[...]%	[...]%
Ortel Mobile	[...]%	[...]%
Solcon	[...]%	[...]%
YES	[...]%	[...]%
Vodafone/Ziggo	[...]%	[...]%
Hollandsenieuwe	[...]%	[...]%
T-Mobile NL	[...]%	[...]%
Thuis	[...]%	[...]%
Ben	[...]%	[...]%
KNIPPR	[...]%	[...]%
Simpel	[...]%	[...]%
TELE2	[...]%	[...]%
InterNL net	[...]%	[...]%
Lebara	[...]%	[...]%
Lycamobile	[...]%	[...]%
Youfone	[...]%	[...]%
Vectone	[...]%	[...]%
AH Mobile	[...]%	[...]%
None; current provider was the provider from my first mobile connection onwards	[...]%	[...]%
Other	[...]%	[...]%

Source: Panteia, 2018

table 41 Which provider did you have before you had your contract/connection with your current provider

	<i>Tele2</i>	
	<i>Gross adds</i>	<i>Internal switchers</i>
KPN	[...]%	[...]%
Telfort	[...]%	[...]%
Simyo	[...]%	[...]%
XS4ALL	[...]%	[...]%
Ortel Mobile	[...]%	[...]%
Solcon	[...]%	[...]%
YES	[...]%	[...]%
Vodafone/Ziggo	[...]%	[...]%
Hollandsenieuwe	[...]%	[...]%
T-Mobile NL	[...]%	[...]%
Thuis	[...]%	[...]%
Ben	[...]%	[...]%
KNIPPR	[...]%	[...]%
Simpel	[...]%	[...]%
TELE2	[...]%	[...]%
InterNL net	[...]%	[...]%
Lebara	[...]%	[...]%
Lycamobile	[...]%	[...]%
Youfone	[...]%	[...]%
Vectone	[...]%	[...]%
AH Mobile	[...]%	[...]%
None; current provider was the provider from my first mobile connection onwards	[...]%	[...]%
Other	[...]%	[...]%

Source: Panteia, 2018

table 42 Which provider did you have before you had your contract/connection with your current provider

	<i>Simpel</i>	
	<i>Gross adds</i>	<i>Internal switchers</i>
KPN	[...]%	[...]%
Telfort	[...]%	[...]%
Simyo	[...]%	[...]%
XS4ALL	[...]%	[...]%
Ortel Mobile	[...]%	[...]%
Solcon	[...]%	[...]%
YES	[...]%	[...]%
Vodafone/Ziggo	[...]%	[...]%
Hollandsenieuwe	[...]%	[...]%
T-Mobile NL	[...]%	[...]%
Thuis	[...]%	[...]%
Ben	[...]%	[...]%
KNIPPR	[...]%	[...]%
Simpel	[...]%	[...]%
TELE2	[...]%	[...]%
InterNL net	[...]%	[...]%
Lebara	[...]%	[...]%
Lycamobile	[...]%	[...]%
Youfone	[...]%	[...]%
Vectone	[...]%	[...]%
AH Mobile	[...]%	[...]%
None; current provider was the provider from my first mobile connection onwards	[...]%	[...]%
Other	[...]%	[...]%

Source: Panteia, 2018

figure 14 At many providers you can choose for a package that gives access to both mobile and landline communications for a set amount per month. Do you expect to consider such a package in future provider decisions?

[...] *Source: Panteia, 2018*

figure 15 At many providers you can choose for a package that gives access to both mobile and landline communications for a set amount per month. Do you expect to consider such a package in future provider decisions?

[...] *Source: Panteia, 2018*

figure 16 At many providers you can choose for a package that gives access to both mobile and landline communications for a set amount per month. Do you expect to consider such a package in future provider decisions?

[...] *Source: Panteia, 2018*

Annex 5.2 Disaggregated to type contract

table 43 Do you combine the mobile connection from T-Mobile with T-Mobile Thuis with interactive TV on the same address or do you use T-Mobile Samen or Alles onder 1 dak? (question only posed to T-Mobile customers)

	T-Mobile	
	Postpaid	Prepaid
Yes, T-Mobile thuis with interactive TV	[...]%	[...]%
Yes, T-Mobile Samen	[...]%	[...]%
Yes, Alles onder 1 dak	[...]%	[...]%
No, only mobile Contract	[...]%	[...]%

Source: Panteia, 2018

figure 17 When choosing your current provider of mobile services, did you consider more than one provider?



Source: Panteia, 2018

figure 18 When choosing your current provider of mobile services, did you consider more than one provider?



Source: Panteia, 2018

table 44 When you last chose a contract or connection for mobile services, where did you do this?

	<i>T-Mobile</i>	
	<i>Postpaid</i>	<i>Prepaid</i>
In a store operated by the provider itself	[...]%	[...]%
In a store operated by a third party, for example Mediamarkt or Phone House	[...]%	[...]%
Online via the provider's website	[...]%	[...]%
Online via a third party, for example Belsimpel, Phone House or Mediamarkt	[...]%	[...]%
By telephone contact with mobile provider	[...]%	[...]%
By telephone via a third party, for example Mediamarkt or Phone House	[...]%	[...]%
Other	[...]%	[...]%

Source: Panteia, 2018

table 45 When you last chose a contract or connection for mobile services, where did you do this?

	<i>Tele2</i>	
	<i>Postpaid</i>	<i>Prepaid</i>
In a store operated by the provider itself	[...]%	[...]%
In a store operated by a third party, for example Mediamarkt or Phone House	[...]%	[...]%
Online via the provider's website	[...]%	[...]%
Online via a third party, for example Belsimpel, Phone House or Mediamarkt	[...]%	[...]%
By telephone contact with mobile provider	[...]%	[...]%
By telephone via a third party, for example Mediamarkt or Phone House	[...]%	[...]%
Other	[...]%	[...]%

Source: Panteia, 2018

table 46 Which of the following factors have been of influence in the decision for your current contract/connection? Multiple answers possible.

	<i>T-Mobile</i>	
	<i>Postpaid</i>	<i>Prepaid</i>
The price in terms of costs and interchangeability of call minutes, data and sms	[...]%	[...]%
Reliability and coverage of the network	[...]%	[...]%
Network performance, e.g. speed	[...]%	[...]%
Quality of customer service	[...]%	[...]%
Range and quality of the mobile device	[...]%	[...]%
Provider has a good reputation	[...]%	[...]%
Possibility to combine with a package that includes landline services, internet and/or TV	[...]%	[...]%
Other	[...]%	[...]%
None	[...]%	[...]%

Source: Panteia, 2018

table 47 Which of the following factors have been of influence in the decision for your current contract/connection? Multiple answers possible.

	<i>Tele2</i>	
	<i>Postpaid</i>	<i>Prepaid</i>
The price in terms of costs and interchangeability of call minutes, data and sms	[...]%	[...]%
Reliability and coverage of the network	[...]%	[...]%
Network performance, e.g. speed	[...]%	[...]%
Quality of customer service	[...]%	[...]%
Range and quality of the mobile device	[...]%	[...]%
Provider has a good reputation	[...]%	[...]%
Possibility to combine with a package that includes landline services, internet and/or TV	[...]%	[...]%
Other	[...]%	[...]%
None	[...]%	[...]%

Source: Panteia, 2018

table 48 Which of these factors was most important in making your decision?

	<i>T-Mobile</i>	
	<i>Postpaid</i>	<i>Prepaid</i>
The price in terms of costs and interchangeability of call minutes, data and sms	[...]%	[...]%
Reliability and coverage of the network	[...]%	[...]%
Network performance, e.g. speed	[...]%	[...]%
Quality of customer service	[...]%	[...]%
Range and quality of the mobile device	[...]%	[...]%
Provider has a good reputation	[...]%	[...]%
Possibility to combine with a package that includes landline services, internet and/or TV	[...]%	[...]%
None	[...]%	[...]%
Other factors	[...]%	[...]%

Source: Panteia, 2018

table 49 Which of these factors was most important in making your decision?

	<i>Tele2</i>	
	<i>Postpaid</i>	<i>Prepaid</i>
The price in terms of costs and interchangeability of call minutes, data and sms	[...]%	[...]%
Reliability and coverage of the network	[...]%	[...]%
Network performance, e.g. speed	[...]%	[...]%
Quality of customer service	[...]%	[...]%
Range and quality of the mobile device	[...]%	[...]%
Provider has a good reputation	[...]%	[...]%
Possibility to combine with a package that includes landline services, internet and/or TV	[...]%	[...]%
None	[...]%	[...]%
Other factors	[...]%	[...]%

Source: Panteia, 2018

table 50 How much do you approximately pay on average per month for your current mobile services contract?

	<i>T-Mobile</i>	
	<i>Postpaid</i>	<i>Prepaid</i>
less than 5 euro per month	[...]%	[...]%
5 to 10 euro per month	[...]%	[...]%
10 to 20 euro per month	[...]%	[...]%
20 to 30 euro per month	[...]%	[...]%
30 to 50 euro per month	[...]%	[...]%
More than 50 euro per month	[...]%	[...]%

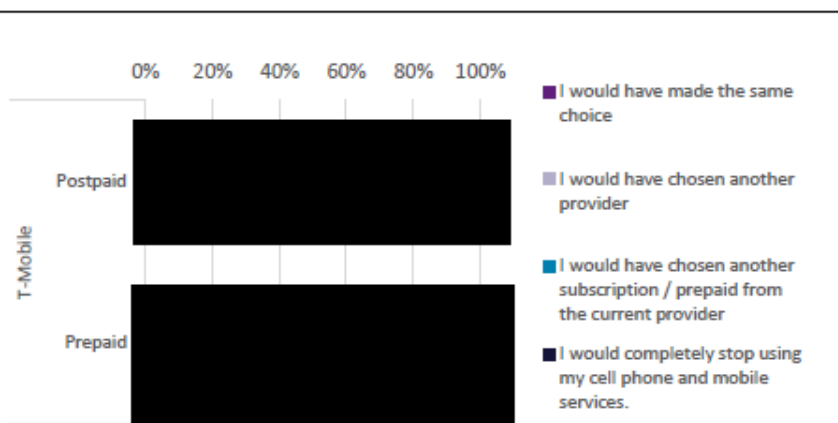
Source: Panteia, 2018

table 51 How much do you approximately pay on average per month for your current mobile services contract?

<i>Tele2</i>		
	<i>Postpaid</i>	<i>Prepaid</i>
less than 5 euro per month	[...]%	[...]%
5 to 10 euro per month	[...]%	[...]%
10 to 20 euro per month	[...]%	[...]%
20 to 30 euro per month	[...]%	[...]%
30 to 50 euro per month	[...]%	[...]%
More than 50 euro per month	[...]%	[...]%

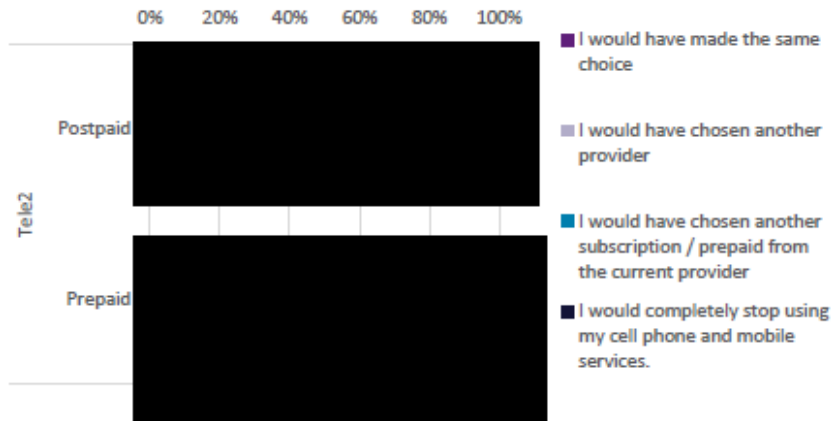
Source: Panteia, 2018

figure 19 What if, when choosing your current contract all prepaid and postpaid packages of your current provider including yours were 10% more expensive, while prices of other providers remained unchanged. What would you have done?



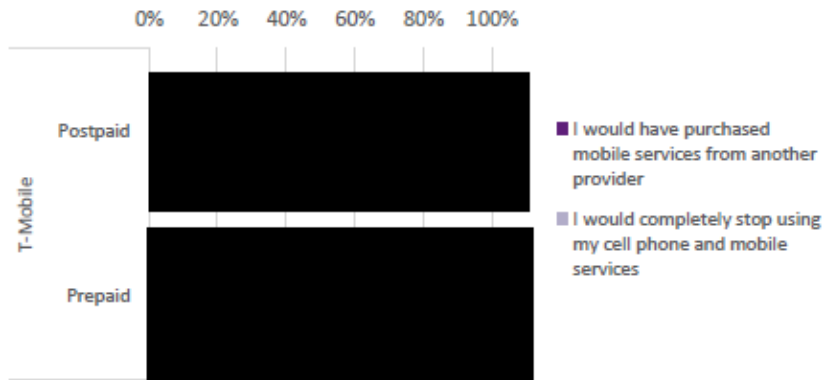
Source: Panteia, 2018

figure 20 What if, when choosing your current contract all prepaid and postpaid packages of your current provider including yours were 10% more expensive, while prices of other providers remained unchanged. What would you have done?



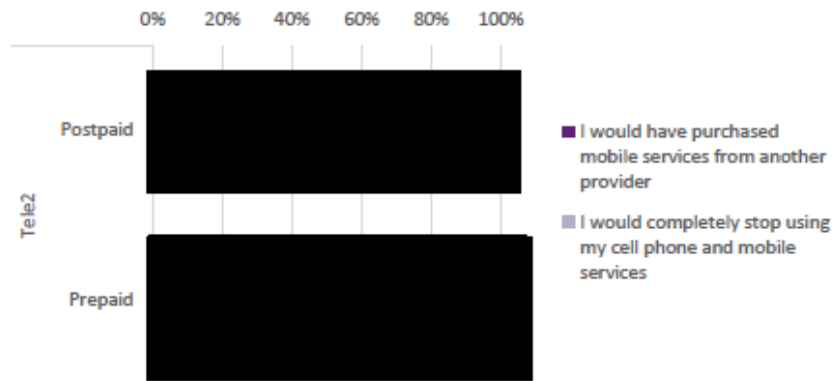
Source: Panteia, 2018

figure 21 Suppose that the last time you chose a provider, you could not have chosen your current provider. What if your current provider did not exist. What would you probably have done?



Source: Panteia, 2018

figure 22 Suppose that the last time you chose a provider, you could not have chosen your current provider. What if your current provider did not exist. What would you probably have done?



Source: Panteia, 2018

table 52 You indicated that if you had not been able to choose for your current provider, you would have chosen for another one. Which provider would you have chosen?

	<i>T-Mobile</i>	
	<i>Postpaid</i>	<i>Prepaid</i>
KPN	[...]%	[...]%
Telfort	[...]%	[...]%
Simyo	[...]%	[...]%
XS4ALL	[...]%	[...]%
Ortel Mobile	[...]%	[...]%
Solcon	[...]%	[...]%
YES	[...]%	[...]%
Vodafone/Ziggo	[...]%	[...]%
Hollandsnieuwe	[...]%	[...]%
T-Mobile NL	[...]%	[...]%
Thuis	[...]%	[...]%
Ben	[...]%	[...]%
KNIPPR	[...]%	[...]%
Simpel	[...]%	[...]%
TELE2	[...]%	[...]%
InterNL net	[...]%	[...]%
Lebara	[...]%	[...]%
Lycamobile	[...]%	[...]%
Youfone	[...]%	[...]%
Vectone	[...]%	[...]%
AH Mobile	[...]%	[...]%
I do not know yet. I would first try to get more information.	[...]%	[...]%

Source: Panteia, 2018

table 53 You indicated that if you had not been able to choose for your current provider, you would have chosen for another one. Which provider would you have chosen?

	<i>Tele2</i>	
	<i>Postpaid</i>	<i>Prepaid</i>
KPN	[...]%	[...]%
Telfort	[...]%	[...]%
Simyo	[...]%	[...]%
XS4ALL	[...]%	[...]%
Ortel Mobile	[...]%	[...]%
Solcon	[...]%	[...]%
YES	[...]%	[...]%
Vodafone/Ziggo	[...]%	[...]%
Hollandsenieuwe	[...]%	[...]%
T-Mobile NL	[...]%	[...]%
Thuis	[...]%	[...]%
Ben	[...]%	[...]%
KNIPPR	[...]%	[...]%
Simpel	[...]%	[...]%
TELE2	[...]%	[...]%
InterNL net	[...]%	[...]%
Lebara	[...]%	[...]%
Lycamobile	[...]%	[...]%
Youfone	[...]%	[...]%
Vectone	[...]%	[...]%
AH Mobile	[...]%	[...]%
Other	[...]%	[...]%

Source: Panteia, 2018

table 54 What sort of connection would you probably have chosen from this other provider

<i>T-Mobile</i>		
	<i>Postpaid</i>	<i>Prepaid</i>
Prepaid	[...]%	[...]%
Contract	[...]%	[...]%
A contract for a combination of mobile and landline telecommunications and/or internet and/or tv	[...]%	[...]%
Other	[...]%	[...]%

Source: Panteia, 2018

table 55 What sort of connection would you probably have chosen from this other provider

<i>Tele2</i>		
	<i>Postpaid</i>	<i>Prepaid</i>
Prepaid	[...]%	[...]%
Contract	[...]%	[...]%
A contract for a combination of mobile and landline telecommunications and/or internet and/or tv	[...]%	[...]%
Other	[...]%	[...]%

Source: Panteia, 2018

table 56 Which provider did you have before you had your contract/connection with your current provider

	<i>T-Mobile</i>	
	<i>Postpaid</i>	<i>Prepaid</i>
KPN	[...]%	[...]%
Telfort	[...]%	[...]%
Simyo	[...]%	[...]%
XS4ALL	[...]%	[...]%
Ortel Mobile	[...]%	[...]%
Solcon	[...]%	[...]%
YES	[...]%	[...]%
Vodafone/Ziggo	[...]%	[...]%
Hollandsenieuwe	[...]%	[...]%
T-Mobile NL	[...]%	[...]%
Thuis	[...]%	[...]%
Ben	[...]%	[...]%
KNIPPR	[...]%	[...]%
Simpel	[...]%	[...]%
TELE2	[...]%	[...]%
InterNL net	[...]%	[...]%
Lebara	[...]%	[...]%
Lycamobile	[...]%	[...]%
Youfone	[...]%	[...]%
Vectone	[...]%	[...]%
AH Mobile	[...]%	[...]%
None; current provider was the provider from my first mobile connection onwards	[...]%	[...]%
Other	[...]%	[...]%

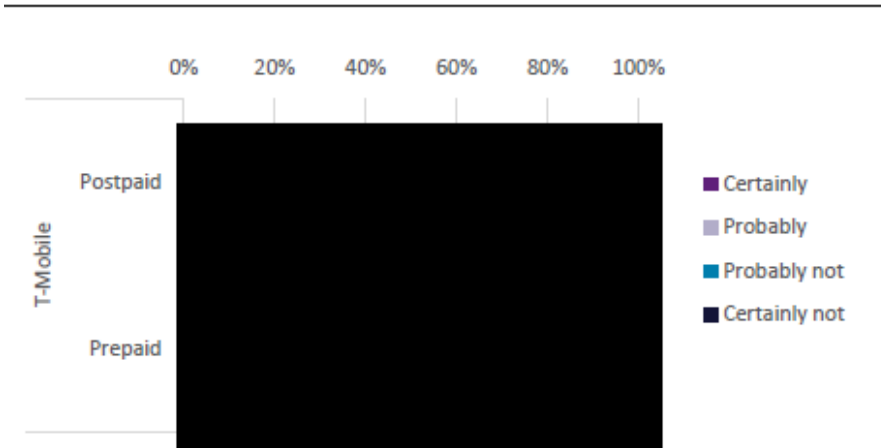
Source: Panteia, 2018

table 57 Which provider did you have before you had your contract/connection with your current provider

	<i>Tele2</i>	
	<i>Postpaid</i>	<i>Prepaid</i>
KPN	[...]%	[...]%
Telfort	[...]%	[...]%
Simyo	[...]%	[...]%
XS4ALL	[...]%	[...]%
Ortel Mobile	[...]%	[...]%
Solcon	[...]%	[...]%
YES	[...]%	[...]%
Vodafone/Ziggo	[...]%	[...]%
Hollandsenieuwe	[...]%	[...]%
T-Mobile NL	[...]%	[...]%
Thuis	[...]%	[...]%
Ben	[...]%	[...]%
KNIPPR	[...]%	[...]%
Simpel	[...]%	[...]%
TELE2	[...]%	[...]%
InterNL net	[...]%	[...]%
Lebara	[...]%	[...]%
Lycamobile	[...]%	[...]%
Youfone	[...]%	[...]%
Vectone	[...]%	[...]%
AH Mobile	[...]%	[...]%
None; current provider was the provider from my first mobile connection onwards	[...]%	[...]%
Other	[...]%	[...]%

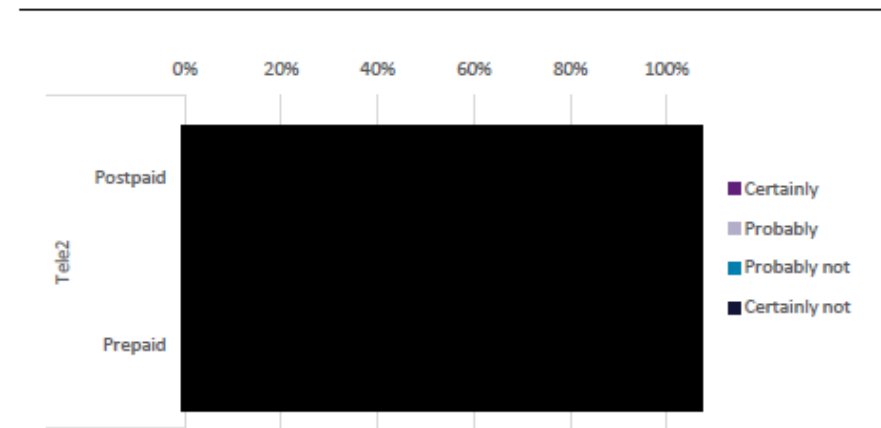
Source: Panteia, 2018

figure 23 At many providers you can choose for a package that gives access to both mobile and landline communications for a set amount per month. Do you expect to consider such a package in future provider decisions?



Source: Panteia, 2018

figure 24 At many providers you can choose for a package that gives access to both mobile and landline communications for a set amount per month. Do you expect to consider such a package in future provider decisions?



Source: Panteia, 2018

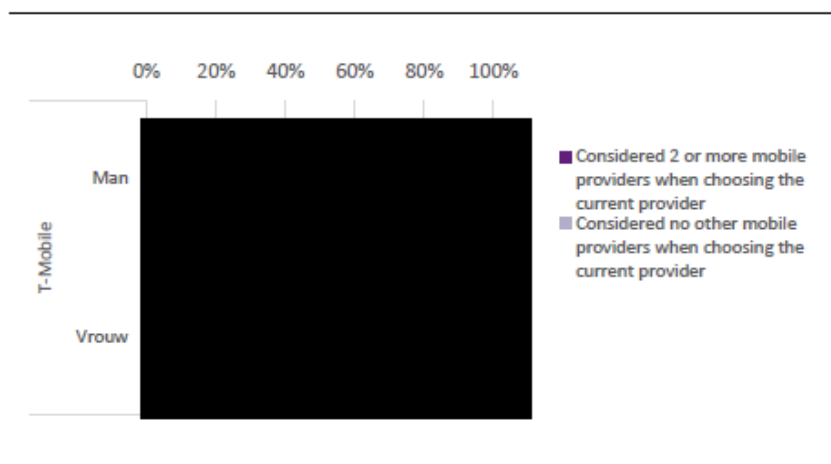
Annex 5.3 Disaggregated to sex

table 58 Do you combine the mobile connection from T-Mobile with T-Mobile Thuis with interactive TV on the same address or do you use T-Mobile Samen or Alles onder 1 dak? (question only posed to T-Mobile customers)

	T-Mobile	
	Male	Female
Yes, T-Mobile thuis with interactive TV	[...]%	[...]%
Yes, T-Mobile Samen	[...]%	[...]%
Yes, Alles onder 1 dak	[...]%	[...]%
No, only mobile Contract	[...]%	[...]%

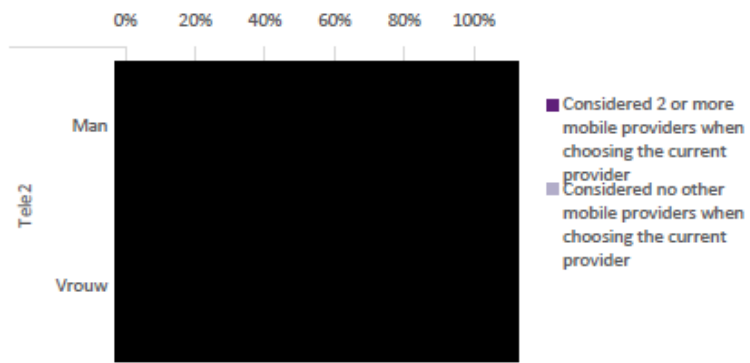
Source: Panteia, 2018

figure 25 When choosing your current provider of mobile services, did you consider more than one provider?



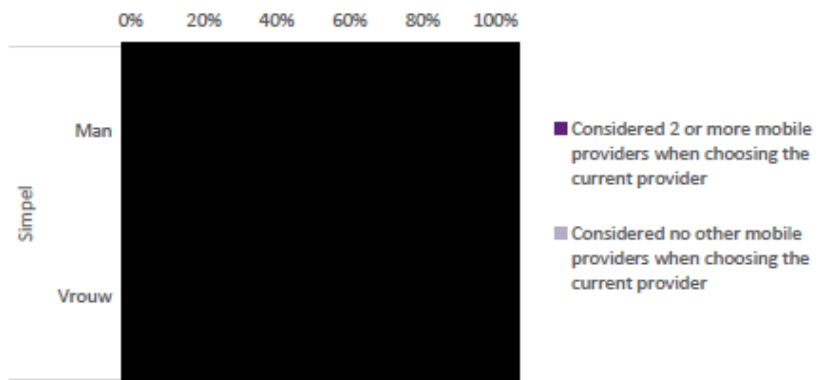
Source: Panteia, 2018

figure 26 When choosing your current provider of mobile services, did you consider more than one provider?



Source: Panteia, 2018

figure 27 When choosing your current provider of mobile services, did you consider more than one provider?



Source: Panteia, 2018

table 59 Toen u voor het laatst uw huidige contract/ aansluiting voor mobiele telefonie heeft gekozen, waar heeft u dat toen gedaan?

	<i>T-Mobile</i>	
	<i>Male</i>	<i>Female</i>
In a store operated by the provider itself	[...]%	[...]%
In a store operated by a third party, for example Mediamarkt of Phone House	[...]%	[...]%
Online via the provider's website	[...]%	[...]%
Online via a third party, for example Belsimpel, Phone House of Mediamarkt	[...]%	[...]%
By telephone contact with mobile provider	[...]%	[...]%
By telephone via a third party, for example Mediamarkt of Phone House	[...]%	[...]%
Other	[...]%	[...]%

Source: Panteia, 2018

table 60 Toen u voor het laatst uw huidige contract/ aansluiting voor mobiele telefonie heeft gekozen, waar heeft u dat toen gedaan?

	<i>Tele2</i>	
	<i>Male</i>	<i>Female</i>
In a store operated by the provider itself	[...]%	[...]%
In a store operated by a third party, for example Mediamarkt of Phone House	[...]%	[...]%
Online via the provider's website	[...]%	[...]%
Online via a third party, for example Belsimpel, Phone House of Mediamarkt	[...]%	[...]%
By telephone contact with mobile provider	[...]%	[...]%
By telephone via a third party, for example Mediamarkt of Phone House	[...]%	[...]%
Other	[...]%	[...]%

Source: Panteia, 2018

table 61 Toen u voor het laatst uw huidige contract/ aansluiting voor mobiele telefonie heeft gekozen, waar heeft u dat toen gedaan?

	<i>Simpel</i>	
	<i>Male</i>	<i>Female</i>
In a store operated by the provider itself	[...]%	[...]%
In a store operated by a third party, for example Mediamarkt of Phone House	[...]%	[...]%
Online via the provider's website	[...]%	[...]%
Online via a third party, for example Belsimpel, Phone House of Mediamarkt	[...]%	[...]%
By telephone contact with mobile provider	[...]%	[...]%
By telephone via a third party, for example Mediamarkt of Phone House	[...]%	[...]%
Other	[...]%	[...]%

Source: Panteia, 2018

table 62 Which of the following factors have been of influence in the decision for your current contract/connection? Multiple answers possible.

	<i>T-Mobile</i>	
	<i>Male</i>	<i>Female</i>
The price in terms of costs and interchangeability of call minutes, data and sms	[...]%	[...]%
Reliability and coverage of the network	[...]%	[...]%
Network performance, e.g. speed	[...]%	[...]%
Quality of customer service	[...]%	[...]%
Range and quality of the mobile device	[...]%	[...]%
Provider has a good reputation	[...]%	[...]%
Possibility to combine with a package that includes landline services, internet and/or TV	[...]%	[...]%
Other	[...]%	[...]%
None	[...]%	[...]%

Source: Panteia, 2018

table 63 Which of the following factors have been of influence in the decision for your current contract/connection? Multiple answers possible.

	<i>Tele2</i>	
	<i>Male</i>	<i>Female</i>
The price in terms of costs and interchangeability of call minutes, data and sms	[...]%	[...]%
Reliability and coverage of the network	[...]%	[...]%
Network performance, e.g. speed	[...]%	[...]%
Quality of customer service	[...]%	[...]%
Range and quality of the mobile device	[...]%	[...]%
Provider has a good reputation	[...]%	[...]%
Possibility to combine with a package that includes landline services, internet and/or TV	[...]%	[...]%
Other	[...]%	[...]%
None	[...]%	[...]%

Source: Panteia, 2018

table 64 Which of the following factors have been of influence in the decision for your current contract/connection? Multiple answers possible.

	<i>Simpel</i>	
	<i>Male</i>	<i>Female</i>
The price in terms of costs and interchangeability of call minutes, data and sms	[...]%	[...]%
Reliability and coverage of the network	[...]%	[...]%
Network performance, e.g. speed	[...]%	[...]%
Quality of customer service	[...]%	[...]%
Range and quality of the mobile device	[...]%	[...]%
Provider has a good reputation	[...]%	[...]%
Possibility to combine with a package that includes landline services, internet and/or TV	[...]%	[...]%
Other	[...]%	[...]%
None	[...]%	[...]%

Source: Panteia, 2018

table 65 Which of these factors was most important in making your decision?

	<i>T-Mobile</i>	
	<i>Male</i>	<i>Female</i>
The price in terms of costs and interchangeability of call minutes, data and sms	[...]%	[...]%
Reliability and coverage of the network	[...]%	[...]%
Network performance, e.g. speed	[...]%	[...]%
Quality of customer service	[...]%	[...]%
Range and quality of the mobile device	[...]%	[...]%
Provider has a good reputation	[...]%	[...]%
Possibility to combine with a package that includes landline services, internet and/or TV	[...]%	[...]%
None	[...]%	[...]%
Other factors	[...]%	[...]%

Source: Panteia, 2018

table 66 Which of these factors was most important in making your decision?

	<i>Tele2</i>	
	<i>Male</i>	<i>Female</i>
The price in terms of costs and interchangeability of call minutes, data and sms	[...]%	[...]%
Reliability and coverage of the network	[...]%	[...]%
Network performance, e.g. speed	[...]%	[...]%
Quality of customer service	[...]%	[...]%
Range and quality of the mobile device	[...]%	[...]%
Provider has a good reputation	[...]%	[...]%
Possibility to combine with a package that includes landline services, internet and/or TV	[...]%	[...]%
None	[...]%	[...]%
Other factors	[...]%	[...]%

Source: Panteia, 2018

table 67 Which of these factors was most important in making your decision?

	<i>Simpel</i>	
	<i>Male</i>	<i>Female</i>
The price in terms of costs and interchangeability of call minutes, data and sms	[...]%	[...]%
Reliability and coverage of the network	[...]%	[...]%
Network performance, e.g. speed	[...]%	[...]%
Quality of customer service	[...]%	[...]%
Range and quality of the mobile device	[...]%	[...]%
Provider has a good reputation	[...]%	[...]%
Possibility to combine with a package that includes landline services, internet and/or TV	[...]%	[...]%
None	[...]%	[...]%
Other factors	[...]%	[...]%

Source: Panteia, 2018

table 68 How much do you approximately pay on average per month for your current mobile services contract?

	<i>T-Mobile</i>	
	<i>Male</i>	<i>Female</i>
less than 5 euro per month	[...]%	[...]%
5 to 10 euro per month	[...]%	[...]%
10 to 20 euro per month	[...]%	[...]%
20 to 30 euro per month	[...]%	[...]%
30 to 50 euro per month	[...]%	[...]%
More than 50 euro per month	[...]%	[...]%

Source: Panteia, 2018

table 69 How much do you approximately pay on average per month for your current mobile services contract?

<i>Tele2</i>		
	<i>Male</i>	<i>Female</i>
less than 5 euro per month	[...]%	[...]%
5 to 10 euro per month	[...]%	[...]%
10 to 20 euro per month	[...]%	[...]%
20 to 30 euro per month	[...]%	[...]%
30 to 50 euro per month	[...]%	[...]%
More than 50 euro per month	[...]%	[...]%

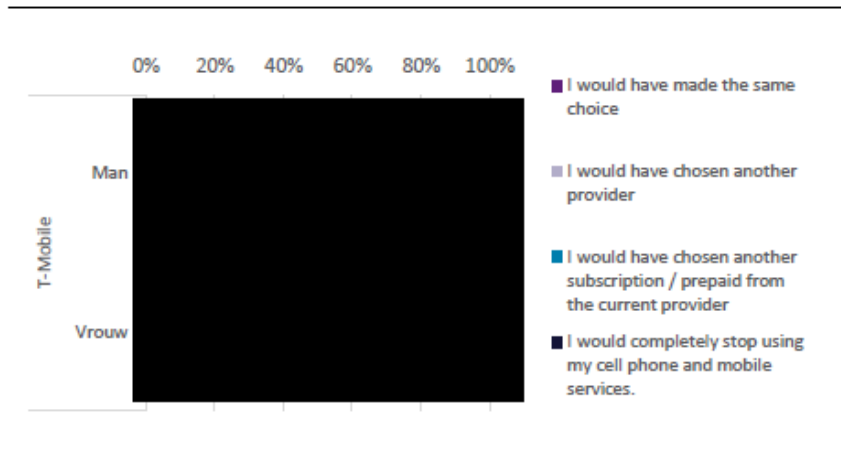
Source: Panteia, 2018

table 70 How much do you approximately pay on average per month for your current mobile services contract?

<i>Simpel Customers</i>		
	<i>Male</i>	<i>Female</i>
less than 5 euro per month	[...]%	[...]%
5 to 10 euro per month	[...]%	[...]%
10 to 20 euro per month	[...]%	[...]%
20 to 30 euro per month	[...]%	[...]%
30 to 50 euro per month	[...]%	[...]%
More than 50 euro per month	[...]%	[...]%

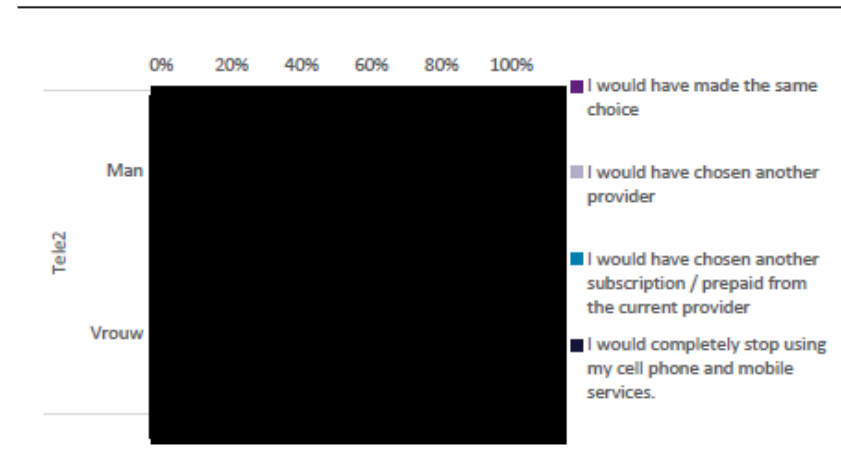
Source: Panteia, 2018

figure 28 What if, when choosing your current contract all prepaid and postpaid packages of your current provider including yours were 10% more expensive, while prices of other providers remained unchanged. What would you have done?



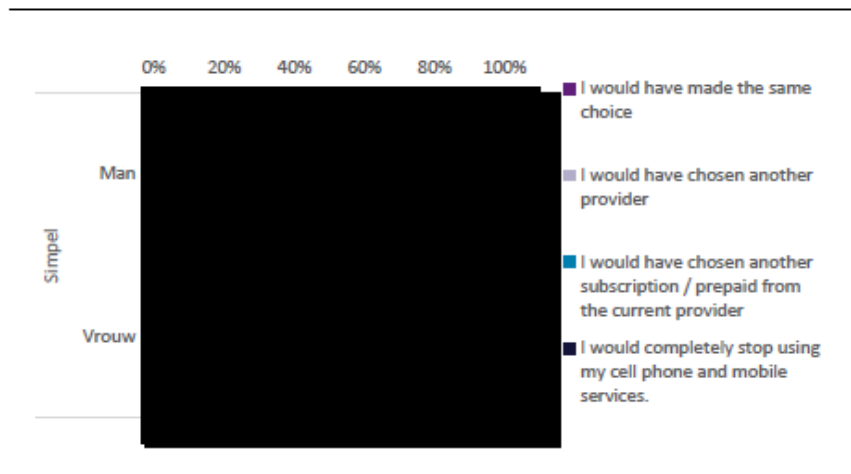
Source: Panteia, 2018

figure 29 What if, when choosing your current contract all prepaid and postpaid packages of your current provider including yours were 10% more expensive, while prices of other providers remained unchanged. What would you have done?



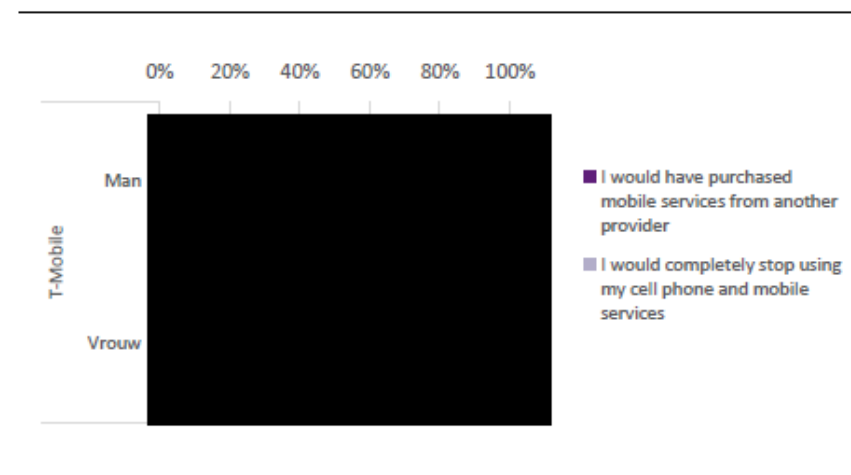
Source: Panteia, 2018

figure 30 What if, when choosing your current contract all prepaid and postpaid packages of your current provider including yours were 10% more expensive, while prices of other providers remained unchanged. What would you have done?



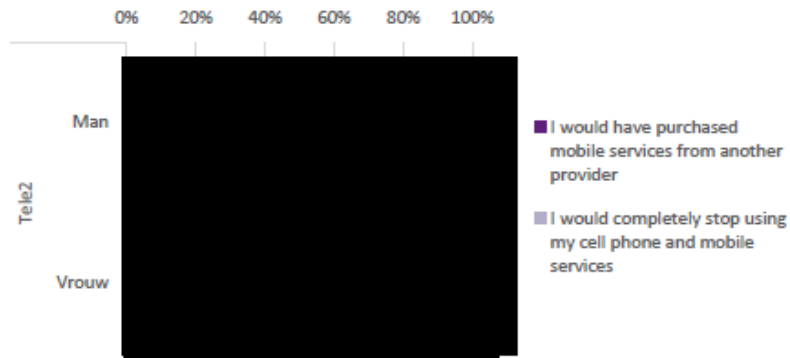
Source: Panteia, 2018

figure 31 Suppose that the last time you chose a provider, you could not have chosen your current provider. What if your current provider did not exist. What would you probably have done?



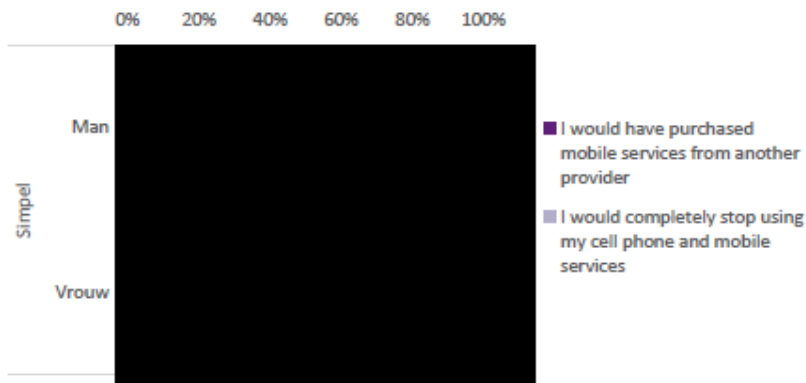
Source: Panteia, 2018

figure 32 Suppose that the last time you chose a provider, you could not have chosen your current provider. What if your current provider did not exist. What would you probably have done?



Source: Panteia, 2018

figure 33 Suppose that the last time you chose a provider, you could not have chosen your current provider. What if your current provider did not exist. What would you probably have done?



Source: Panteia, 2018

table 71 You indicated that if you had not been able to choose for your current provider, you would have chosen for another one. Which provider would you have chosen?

	<i>T-Mobile</i>	
	<i>Male</i>	<i>Female</i>
KPN	[...]%	[...]%
Telfort	[...]%	[...]%
Simyo	[...]%	[...]%
XS4ALL	[...]%	[...]%
Ortel Mobile	[...]%	[...]%
Solcon	[...]%	[...]%
YES	[...]%	[...]%
Vodafone/Ziggo	[...]%	[...]%
Hollandsnieuwe	[...]%	[...]%
T-Mobile NL	[...]%	[...]%
Thuis	[...]%	[...]%
Ben	[...]%	[...]%
KNIPPR	[...]%	[...]%
Simpel	[...]%	[...]%
TELE2	[...]%	[...]%
InterNL net	[...]%	[...]%
Lebara	[...]%	[...]%
Lycamobile	[...]%	[...]%
Youfone	[...]%	[...]%
Vectone	[...]%	[...]%
AH Mobile	[...]%	[...]%
I do not know yet. I would first try to get more information.	[...]%	[...]%

Source: Panteia, 2018

table 72 You indicated that if you had not been able to choose for your current provider, you would have chosen for another one. Which provider would you have chosen?

	<i>Tele2</i>	
	<i>Male</i>	<i>Female</i>
KPN	[...]%	[...]%
Telfort	[...]%	[...]%
Simyo	[...]%	[...]%
XS4ALL	[...]%	[...]%
Ortel Mobile	[...]%	[...]%
Solcon	[...]%	[...]%
YES	[...]%	[...]%
Vodafone/Ziggo	[...]%	[...]%
Hollandsenieuwe	[...]%	[...]%
T-Mobile NL	[...]%	[...]%
Thuis	[...]%	[...]%
Ben	[...]%	[...]%
KNIPPR	[...]%	[...]%
Simpel	[...]%	[...]%
TELE2	[...]%	[...]%
InterNL net	[...]%	[...]%
Lebara	[...]%	[...]%
Lycamobile	[...]%	[...]%
Youfone	[...]%	[...]%
Vectone	[...]%	[...]%
AH Mobile	[...]%	[...]%
I do not know yet. I would first try to get more information.	[...]%	[...]%

Source: Panteia, 2018

table 73 You indicated that if you had not been able to choose for your current provider, you would have chosen for another one. Which provider would you have chosen?

	<i>Simpel</i>	
	<i>Male</i>	<i>Female</i>
KPN	[...]%	[...]%
Telfort	[...]%	[...]%
Simyo	[...]%	[...]%
XS4ALL	[...]%	[...]%
Ortel Mobile	[...]%	[...]%
Solcon	[...]%	[...]%
YES	[...]%	[...]%
Vodafone/Ziggo	[...]%	[...]%
Hollandsenieuwe	[...]%	[...]%
T-Mobile NL	[...]%	[...]%
Thuis	[...]%	[...]%
Ben	[...]%	[...]%
KNIPPR	[...]%	[...]%
Simpel	[...]%	[...]%
TELE2	[...]%	[...]%
InterNL net	[...]%	[...]%
Lebara	[...]%	[...]%
Lycamobile	[...]%	[...]%
Youfone	[...]%	[...]%
Vectone	[...]%	[...]%
AH Mobile	[...]%	[...]%
I do not know yet. I would first try to get more information.	[...]%	[...]%

Source: Panteia, 2018

table 74 What sort of connection would you probably have chosen from this other provider

<i>T-Mobile</i>		
	<i>Male</i>	<i>Female</i>
Prepaid	[...]%	[...]%
Contract	[...]%	[...]%
A contract for a combination of mobile and landline telecommunications and/or internet and/or tv	[...]%	[...]%
Other	[...]%	[...]%

Source: Panteia, 2018

table 75 What sort of connection would you probably have chosen from this other provider

<i>Tele2</i>		
	<i>Male</i>	<i>Female</i>
Prepaid	[...]%	[...]%
Contract	[...]%	[...]%
A contract for a combination of mobile and landline telecommunications and/or internet and/or tv	[...]%	[...]%
Other	[...]%	[...]%

Source: Panteia, 2018

table 76 What sort of connection would you probably have chosen from this other provider

	<i>Simpel</i>	
	<i>Male</i>	<i>Female</i>
Prepaid	[...]%	[...]%
Contract	[...]%	[...]%
A contract for a combination of mobile and landline telecommunications and/or internet and/or tv	[...]%	[...]%
Other	[...]%	[...]%

Source: Panteia, 2018

table 77 Which provider did you have before you had your contract/connection with your current provider

	<i>T-Mobile</i>	
	<i>Male</i>	<i>Female</i>
KPN	[...]%	[...]%
Telfort	[...]%	[...]%
Simyo	[...]%	[...]%
XS4ALL	[...]%	[...]%
Ortel Mobile	[...]%	[...]%
Solcon	[...]%	[...]%
YES	[...]%	[...]%
Vodafone/Ziggo	[...]%	[...]%
Hollandsenieuwe	[...]%	[...]%
T-Mobile NL	[...]%	[...]%
Thuis	[...]%	[...]%
Ben	[...]%	[...]%
KNIPPR	[...]%	[...]%
Simpel	[...]%	[...]%
TELE2	[...]%	[...]%
InterNL net	[...]%	[...]%
Lebara	[...]%	[...]%
Lycamobile	[...]%	[...]%
Youfone	[...]%	[...]%
Vectone	[...]%	[...]%
AH Mobile	[...]%	[...]%
None; current provider was the provider from my first mobile connection onwards	[...]%	[...]%
Other	[...]%	[...]%

Source: Panteia, 2018

table 78 Which provider did you have before you had your contract/connection with your current provider

	<i>Tele2</i>	
	<i>Male</i>	<i>Female</i>
KPN	[...]%	[...]%
Telfort	[...]%	[...]%
Simyo	[...]%	[...]%
XS4ALL	[...]%	[...]%
Ortel Mobile	[...]%	[...]%
Solcon	[...]%	[...]%
YES	[...]%	[...]%
Vodafone/Ziggo	[...]%	[...]%
Hollandsenieuwe	[...]%	[...]%
T-Mobile NL	[...]%	[...]%
Thuis	[...]%	[...]%
Ben	[...]%	[...]%
KNIPPR	[...]%	[...]%
Simpel	[...]%	[...]%
TELE2	[...]%	[...]%
InterNL net	[...]%	[...]%
Lebara	[...]%	[...]%
Lycamobile	[...]%	[...]%
Youfone	[...]%	[...]%
Vectone	[...]%	[...]%
AH Mobile	[...]%	[...]%
None; current provider was the provider from my first mobile connection onwards	[...]%	[...]%
Other	[...]%	[...]%

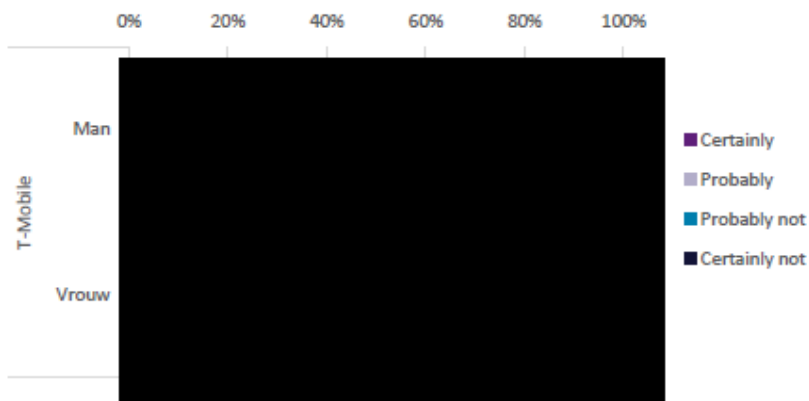
Source: Panteia, 2018

table 79 Which provider did you have before you had your contract/connection with your current provider

	<i>Simpel Customers</i>	
	<i>Male</i>	<i>Female</i>
KPN	[...]%	[...]%
Telfort	[...]%	[...]%
Simyo	[...]%	[...]%
XS4ALL	[...]%	[...]%
Ortel Mobile	[...]%	[...]%
Solcon	[...]%	[...]%
YES	[...]%	[...]%
Vodafone/Ziggo	[...]%	[...]%
Hollandsnieuwe	[...]%	[...]%
T-Mobile NL	[...]%	[...]%
Thuis	[...]%	[...]%
Ben	[...]%	[...]%
KNIPPR	[...]%	[...]%
Simpel	[...]%	[...]%
TELE2	[...]%	[...]%
InterNL net	[...]%	[...]%
Lebara	[...]%	[...]%
Lycamobile	[...]%	[...]%
Youfone	[...]%	[...]%
Vectone	[...]%	[...]%
AH Mobile	[...]%	[...]%
None; current provider was the provider from my first mobile connection onwards	[...]%	[...]%
Other	[...]%	[...]%

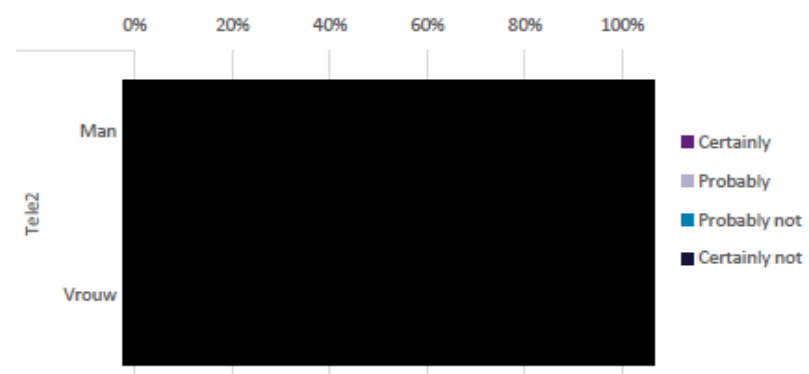
Source: Panteia, 2018

figure 34 At many providers you can choose for a package that gives access to both mobile and landline communications for a set amount per month. Do you expect to consider such a package in future provider decisions? to month.



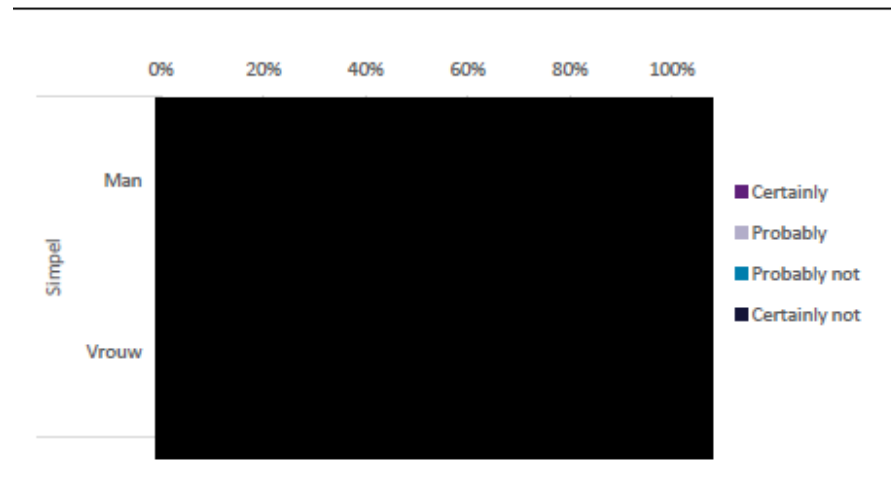
Source: Panteia, 2018

figure 35 At many providers you can choose for a package that gives access to both mobile and landline communications for a set amount per month. Do you expect to consider such a package in future provider decisions? to month.



Source: Panteia, 2018

figure 36 At many providers you can choose for a package that gives access to both mobile and landline communications for a set amount per month. Do you expect to consider such a package in future provider decisions?



Source: Panteia, 2018

Annex 5.4 Disaggregated to age

table 80 When choosing your current provider of mobile services, did you consider more than one provider?

	<i>T-Mobile</i>					
	18 – 24 year	25 – 34 year	35 – 44 year	45 – 54 year	55 – 64 year	65 year or older
Yes, T-Mobile thuis with interactieve TV	[...]	[...]	[...]	[...]	[...]	[...]
Yes, T-Mobile Samen	[...]	[...]	[...]	[...]	[...]	[...]
Yes, Alles onder 1 dak	[...]	[...]	[...]	[...]	[...]	[...]
No, only mobile Contract	[...]	[...]	[...]	[...]	[...]	[...]

Source: Panteia, 2018

table 81 When choosing your current provider of mobile services, did you consider more than one provider?

	<i>T-Mobile</i>					
	18 – 24 year	25 – 34 year	35 – 44 year	45 – 54 year	55 – 64 year	65 year or older
2 or more providers considered when current provider was chosen	[...]	[...]	[...]	[...]	[...]	[...]
No other providers considered when current provider was chosen	[...]	[...]	[...]	[...]	[...]	[...]

Source: Panteia, 2018

table 82 When choosing your current provider of mobile services, did you consider more than one provider?

	<i>Tele2</i>					
	18 – 24 year	25 – 34 year	35 – 44 year	45 – 54 year	55 – 64 year	65 year or older
2 or more providers considered when current provider was chosen	[...]%	[...]%	[...]%	[...]%	[...]%	[...]%
No other providers considered when current provider was chosen	[...]%	[...]%	[...]%	[...]%	[...]%	[...]%

Source: Panteia, 2018

table 83 When choosing your current provider of mobile services, did you consider more than one provider?

	<i>Simpel</i>					
	18 – 24 year	25 – 34 year	35 – 44 year	45 – 54 year	55 – 64 year	65 year or older
2 or more providers considered when current provider was chosen	[...]%	[...]%	[...]%	[...]%	[...]%	[...]%
No other providers considered when current provider was chosen	[...]%	[...]%	[...]%	[...]%	[...]%	[...]%

Source: Panteia, 2018

table 84 Where did you settle your current contract / connection?

	<i>T-Mobile</i>					
	18 – 24 year	25 – 34 year	35 – 44 year	45 – 54 year	55 – 64 year	65 year or older
In a store operated by the provider itself	[...]	[...]	[...]	[...]	[...]	[...]
In a store operated by a third party, for example Mediamarkt of Phone House	[...]	[...]	[...]	[...]	[...]	[...]
Online via the provider's website	[...]	[...]	[...]	[...]	[...]	[...]
Online via a third party, for example Belsimpel, Phone House of Mediamarkt	[...]	[...]	[...]	[...]	[...]	[...]
By telephone contact with mobile provider	[...]	[...]	[...]	[...]	[...]	[...]
By telephone via a third party, for example Mediamarkt of Phone House	[...]	[...]	[...]	[...]	[...]	[...]
Other	[...]	[...]	[...]	[...]	[...]	[...]

Source: Panteia, 2018

table 85 Where did you settle your current contract / connection?

	<i>Tele2</i>					
	18 – 24 year	25 – 34 year	35 – 44 year	45 – 54 year	55 – 64 year	65 year or older
In a store operated by the provider itself	[...]	[...]	[...]	[...]	[...]	[...]
In a store operated by a third party, for example Mediamarkt of Phone House	[...]	[...]	[...]	[...]	[...]	[...]
Online via the provider's website	[...]	[...]	[...]	[...]	[...]	[...]
Online via a third party, for example Belsimpel, Phone House of Mediamarkt	[...]	[...]	[...]	[...]	[...]	[...]
By telephone contact with mobile provider	[...]	[...]	[...]	[...]	[...]	[...]
By telephone via a third party, for example Mediamarkt of Phone House	[...]	[...]	[...]	[...]	[...]	[...]
Other	[...]	[...]	[...]	[...]	[...]	[...]

Source: Panteia, 2018

table 86 Where did you settle your current contract / connection?

	<i>Simpel</i>					
	18 – 24 year	25 – 34 year	35 – 44 year	45 – 54 year	55 – 64 year	65 year or older
In a store operated by the provider itself	[...]	[...]	[...]	[...]	[...]	[...]
In a store operated by a third party, for example Mediamarkt of Phone House	[...]	[...]	[...]	[...]	[...]	[...]
Online via the provider's website	[...]	[...]	[...]	[...]	[...]	[...]
Online via a third party, for example Belsimpel, Phone House of Mediamarkt	[...]	[...]	[...]	[...]	[...]	[...]
By telephone contact with mobile provider	[...]	[...]	[...]	[...]	[...]	[...]
By telephone via a third party, for example Mediamarkt of Phone House	[...]	[...]	[...]	[...]	[...]	[...]
Other	[...]	[...]	[...]	[...]	[...]	[...]

Source: Panteia, 2018

table 87 Which of the following factors have been of influence in the decision for your current contract/connection? Multiple answers possible.

	<i>T-Mobile</i>					
	18 – 24 year	25 – 34 year	35 – 44 year	45 – 54 year	55 – 64 year	65 year or older
The price in terms of costs and interchangeability of call minutes, data and sms	[...]	[...]	[...]	[...]	[...]	[...]
Reliability and coverage of the network	[...]	[...]	[...]	[...]	[...]	[...]
Network performance, e.g. speed	[...]	[...]	[...]	[...]	[...]	[...]
Quality of customer service	[...]	[...]	[...]	[...]	[...]	[...]
Range and quality of the mobile device	[...]	[...]	[...]	[...]	[...]	[...]
Provider has a good reputation	[...]	[...]	[...]	[...]	[...]	[...]
Possibility to combine with a package that includes landline services, internet and/or TV	[...]	[...]	[...]	[...]	[...]	[...]
Other	[...]	[...]	[...]	[...]	[...]	[...]
None	[...]	[...]	[...]	[...]	[...]	[...]

Source: Panteia, 2018

table 88 Which of the following factors have been of influence in the decision for your current contract/connection? Multiple answers possible.

	<i>Tele2</i>					
	18 – 24 year	25 – 34 year	35 – 44 year	45 – 54 year	55 – 64 year	65 year or older
The price in terms of costs and interchangeability of call minutes, data and sms	[...]	[...]	[...]	[...]	[...]	[...]
Reliability and coverage of the network	[...]	[...]	[...]	[...]	[...]	[...]
Network performance, e.g. speed	[...]	[...]	[...]	[...]	[...]	[...]
Quality of customer service	[...]	[...]	[...]	[...]	[...]	[...]
Range and quality of the mobile device	[...]	[...]	[...]	[...]	[...]	[...]
Provider has a good reputation	[...]	[...]	[...]	[...]	[...]	[...]
Possibility to combine with a package that includes landline services, internet and/or TV	[...]	[...]	[...]	[...]	[...]	[...]
Other	[...]	[...]	[...]	[...]	[...]	[...]
None	[...]	[...]	[...]	[...]	[...]	[...]

Source: Panteia, 2018

table 89 Which of the following factors have been of influence in the decision for your current contract/connection? Multiple answers possible.

	<i>Simpel</i>					
	18 – 24 year	25 – 34 year	35 – 44 year	45 – 54 year	55 – 64 year	65 year or older
The price in terms of costs and interchangeability of call minutes, data and sms	[...]	[...]	[...]	[...]	[...]	[...]
Reliability and coverage of the network	[...]	[...]	[...]	[...]	[...]	[...]
Network performance, e.g. speed	[...]	[...]	[...]	[...]	[...]	[...]
Quality of customer service	[...]	[...]	[...]	[...]	[...]	[...]
Range and quality of the mobile device	[...]	[...]	[...]	[...]	[...]	[...]
Provider has a good reputation	[...]	[...]	[...]	[...]	[...]	[...]
Possibility to combine with a package that includes landline services, internet and/or TV	[...]	[...]	[...]	[...]	[...]	[...]
Other	[...]	[...]	[...]	[...]	[...]	[...]
None	[...]	[...]	[...]	[...]	[...]	[...]

Source: Panteia, 2018

table 90 Which of these was the most important factor when making the decision? One answer possible.

	<i>T-Mobile</i>					
	18 – 24 year	25 – 34 year	35 – 44 year	45 – 54 year	55 – 64 year	65 year or older
The price in terms of costs and interchangeability of call minutes, data and sms	[...]	[...]	[...]	[...]	[...]	[...]
Reliability and coverage of the network	[...]	[...]	[...]	[...]	[...]	[...]
Network performance, e.g. speed	[...]	[...]	[...]	[...]	[...]	[...]
Quality of customer service	[...]	[...]	[...]	[...]	[...]	[...]
Range and quality of the mobile device	[...]	[...]	[...]	[...]	[...]	[...]
Provider has a good reputation	[...]	[...]	[...]	[...]	[...]	[...]
Possibility to combine with a package that includes landline services, internet and/or TV	[...]	[...]	[...]	[...]	[...]	[...]
Other	[...]	[...]	[...]	[...]	[...]	[...]
None	[...]	[...]	[...]	[...]	[...]	[...]

Source: Panteia, 2018

table 91 Which of these was the most important factor when making the decision? One answer possible.

	<i>Tele2</i>					
	18 – 24 year	25 – 34 year	35 – 44 year	45 – 54 year	55 – 64 year	65 year or older
The price in terms of costs and interchangeability of call minutes, data and sms	[...]	[...]	[...]	[...]	[...]	[...]
Reliability and coverage of the network	[...]	[...]	[...]	[...]	[...]	[...]
Network performance, e.g. speed	[...]	[...]	[...]	[...]	[...]	[...]
Quality of customer service	[...]	[...]	[...]	[...]	[...]	[...]
Range and quality of the mobile device	[...]	[...]	[...]	[...]	[...]	[...]
Provider has a good reputation	[...]	[...]	[...]	[...]	[...]	[...]
Possibility to combine with a package that includes landline services, internet and/or TV	[...]	[...]	[...]	[...]	[...]	[...]
Other	[...]	[...]	[...]	[...]	[...]	[...]
None	[...]	[...]	[...]	[...]	[...]	[...]

Source: Panteia, 2018

table 92 Which of these was the most important factor when making the decision? One answer possible.

	<i>Simpel</i>					
	18 – 24 year	25 – 34 year	35 – 44 year	45 – 54 year	55 – 64 year	65 year or older
The price in terms of costs and interchangeability of call minutes, data and sms	[...]	[...]	[...]	[...]	[...]	[...]
Reliability and coverage of the network	[...]	[...]	[...]	[...]	[...]	[...]
Network performance, e.g. speed	[...]	[...]	[...]	[...]	[...]	[...]
Quality of customer service	[...]	[...]	[...]	[...]	[...]	[...]
Range and quality of the mobile device	[...]	[...]	[...]	[...]	[...]	[...]
Provider has a good reputation	[...]	[...]	[...]	[...]	[...]	[...]
Possibility to combine with a package that includes landline services, internet and/or TV	[...]	[...]	[...]	[...]	[...]	[...]
Other	[...]	[...]	[...]	[...]	[...]	[...]
None	[...]	[...]	[...]	[...]	[...]	[...]

Source: Panteia, 2018

table 93 How much do you approximately pay on average per month for your mobile services plan?

	<i>T-Mobile</i>					
	18 – 24 year	25 – 34 year	35 – 44 year	45 – 54 year	55 – 64 year	65 year or older
less than 5 euro per month	[...]	[...]	[...]	[...]	[...]	[...]
5 to 10 euro per month	[...]	[...]	[...]	[...]	[...]	[...]
10 to 20 euro per month	[...]	[...]	[...]	[...]	[...]	[...]
20 to 30 euro per month	[...]	[...]	[...]	[...]	[...]	[...]
30 to 50 euro per month	[...]	[...]	[...]	[...]	[...]	[...]
More than 50 euro per month	[...]	[...]	[...]	[...]	[...]	[...]

Source: Panteia, 2018

table 94 How much do you approximately pay on average per month for your mobile services plan?

	<i>Tele2</i>					
	18 – 24 year	25 – 34 year	35 – 44 year	45 – 54 year	55 – 64 year	65 year or older
less than 5 euro per month	[...]	[...]	[...]	[...]	[...]	[...]
5 to 10 euro per month	[...]	[...]	[...]	[...]	[...]	[...]
10 to 20 euro per month	[...]	[...]	[...]	[...]	[...]	[...]
20 to 30 euro per month	[...]	[...]	[...]	[...]	[...]	[...]
30 to 50 euro per month	[...]	[...]	[...]	[...]	[...]	[...]
More than 50 euro per month	[...]	[...]	[...]	[...]	[...]	[...]

Source: Panteia, 2018

table 95 How much do you approximately pay on average per month for your mobile services plan?

	<i>Simpel</i>					
	18 – 24 year	25 – 34 year	35 – 44 year	45 – 54 year	55 – 64 year	65 year or older
less than 5 euro per month	[...]	[...]	[...]	[...]	[...]	[...]
5 to 10 euro per month	[...]	[...]	[...]	[...]	[...]	[...]
10 to 20 euro per month	[...]	[...]	[...]	[...]	[...]	[...]
20 to 30 euro per month	[...]	[...]	[...]	[...]	[...]	[...]
30 to 50 euro per month	[...]	[...]	[...]	[...]	[...]	[...]
More than 50 euro per month	[...]	[...]	[...]	[...]	[...]	[...]

Source: Panteia, 2018

table 96 What if, when choosing your current contract all prepaid and postpaid packages of your current provider including yours were 10% more expensive, while prices of other providers remained unchanged. What would you have done?

	<i>T-Mobile</i>					
	18 – 24 year	25 – 34 year	35 – 44 year	45 – 54 year	55 – 64 year	65 year or older
I would have made the same choice	[...]	[...]	[...]	[...]	[...]	[...]
I would have chosen a different provider	[...]	[...]	[...]	[...]	[...]	[...]
I would have chosen a different contract / prepaid plan of my current provider	[...]	[...]	[...]	[...]	[...]	[...]
I would have completely stopped with using my phone and mobile telecom services.	[...]	[...]	[...]	[...]	[...]	[...]

Source: Panteia, 2018

table 97 What if, when choosing your current contract all prepaid and postpaid packages of your current provider including yours were 10% more expensive, while prices of other providers remained unchanged. What would you have done?

	<i>Tele2</i>					
	18 – 24 year	25 – 34 year	35 – 44 year	45 – 54 year	55 – 64 year	65 year or older
I would have made the same choice	[...]	[...]	[...]	[...]	[...]	[...]
I would have chosen a different provider	[...]	[...]	[...]	[...]	[...]	[...]
I would have chosen a different contract / prepaid plan of my current provider	[...]	[...]	[...]	[...]	[...]	[...]
I would have completely stopped with using my phone and mobile telecom services.	[...]	[...]	[...]	[...]	[...]	[...]

Source: Panteia, 2018

table 98 What if, when choosing your current contract all prepaid and postpaid packages of your current provider including yours were 10% more expensive, while prices of other providers remained unchanged. What would you have done?

	<i>Simpel</i>					
	18 – 24 year	25 – 34 year	35 – 44 year	45 – 54 year	55 – 64 year	65 year or older
I would have made the same choice	[...]	[...]	[...]	[...]	[...]	[...]
I would have chosen a different provider	[...]	[...]	[...]	[...]	[...]	[...]
I would have chosen a different contract / prepaid plan of my current provider	[...]	[...]	[...]	[...]	[...]	[...]
I would have completely stopped with using my phone and mobile telecom services.	[...]	[...]	[...]	[...]	[...]	[...]

Source: Panteia, 2018

table 99 Suppose that the last time you chose a provider, you could not have chosen your current provider. What if your current provider did not exist. What would you probably have done?

	<i>T-Mobile</i>					
	18 – 24 year	25 – 34 year	35 – 44 year	45 – 54 year	55 – 64 year	65 year or older
I would have chosen another provider	[...]%	[...]%	[...]%	[...]%	[...]%	[...]%
I would have completely stopped with using my phone and mobile telecom services	[...]%	[...]%	[...]%	[...]%	[...]%	[...]%

Source: Panteia, 2018

table 100 Suppose that the last time you chose a provider, you could not have chosen your current provider. What if your current provider did not exist. What would you probably have done?

	<i>Tele2</i>					
	18 – 24 year	25 – 34 year	35 – 44 year	45 – 54 year	55 – 64 year	65 year or older
I would have chosen another provider	[...]%	[...]%	[...]%	[...]%	[...]%	[...]%
I would have completely stopped with using my phone and mobile telecom services	[...]%	[...]%	[...]%	[...]%	[...]%	[...]%

Source: Panteia, 2018

table 101 Suppose that the last time you chose a provider, you could not have chosen your current provider. What if your current provider did not exist. What would you probably have done?

	<i>Simpel</i>					
	18 – 24 year	25 – 34 year	35 – 44 year	45 – 54 year	55 – 64 year	65 year or older
I would have chosen another provider	[...]%	[...]%	[...]%	[...]%	[...]%	[...]%
I would have completely stopped with using my phone and mobile telecom services	[...]%	[...]%	[...]%	[...]%	[...]%	[...]%

Source: Panteia, 2018

table 102 You indicated that if you had not been able to choose for your current provider, you would have chosen for another one. Which provider would you have chosen?

	<i>T-Mobile</i>					
	18 – 24 year	25 – 34 year	35 – 44 year	45 – 54 year	55 – 64 year	65 year or older
KPN	[...]	[...]	[...]	[...]	[...]	[...]
Telfort	[...]	[...]	[...]	[...]	[...]	[...]
Simyo	[...]	[...]	[...]	[...]	[...]	[...]
XS4ALL	[...]	[...]	[...]	[...]	[...]	[...]
Ortel Mobile	[...]	[...]	[...]	[...]	[...]	[...]
Solcon	[...]	[...]	[...]	[...]	[...]	[...]
YES	[...]	[...]	[...]	[...]	[...]	[...]
Vodafone/Ziggo	[...]	[...]	[...]	[...]	[...]	[...]
Hollandsenieuwe	[...]	[...]	[...]	[...]	[...]	[...]
T-Mobile NL	[...]	[...]	[...]	[...]	[...]	[...]
Thuis	[...]	[...]	[...]	[...]	[...]	[...]
Ben	[...]	[...]	[...]	[...]	[...]	[...]
KNIPPR	[...]	[...]	[...]	[...]	[...]	[...]
Simpel	[...]	[...]	[...]	[...]	[...]	[...]
TELE2	[...]	[...]	[...]	[...]	[...]	[...]
InterNL net	[...]	[...]	[...]	[...]	[...]	[...]
Lebara	[...]	[...]	[...]	[...]	[...]	[...]
Lycamobile	[...]	[...]	[...]	[...]	[...]	[...]
Youfone	[...]	[...]	[...]	[...]	[...]	[...]
Vectone	[...]	[...]	[...]	[...]	[...]	[...]
AH Mobile	[...]	[...]	[...]	[...]	[...]	[...]
Don't know yet, I would first try to get new information	[...]	[...]	[...]	[...]	[...]	[...]

Source: Panteia, 2018

table 103 You indicated that if you had not been able to choose for your current provider, you would have chosen for another one. Which provider would you have chosen?

	Tele2					
	18 – 24 year	25 – 34 year	35 – 44 year	45 – 54 year	55 – 64 year	65 year or older
KPN	[...]	[...]	[...]	[...]	[...]	[...]
Telfort	[...]	[...]	[...]	[...]	[...]	[...]
Simyo	[...]	[...]	[...]	[...]	[...]	[...]
XS4ALL	[...]	[...]	[...]	[...]	[...]	[...]
Ortel Mobile	[...]	[...]	[...]	[...]	[...]	[...]
Solcon	[...]	[...]	[...]	[...]	[...]	[...]
YES	[...]	[...]	[...]	[...]	[...]	[...]
Vodafone/Ziggo	[...]	[...]	[...]	[...]	[...]	[...]
Hollandsenieuwe	[...]	[...]	[...]	[...]	[...]	[...]
T-Mobile NL	[...]	[...]	[...]	[...]	[...]	[...]
Thuis	[...]	[...]	[...]	[...]	[...]	[...]
Ben	[...]	[...]	[...]	[...]	[...]	[...]
KNIPPR	[...]	[...]	[...]	[...]	[...]	[...]
Simpel	[...]	[...]	[...]	[...]	[...]	[...]
TELE2	[...]	[...]	[...]	[...]	[...]	[...]
InterNL net	[...]	[...]	[...]	[...]	[...]	[...]
Lebara	[...]	[...]	[...]	[...]	[...]	[...]
Lycamobile	[...]	[...]	[...]	[...]	[...]	[...]
Youfone	[...]	[...]	[...]	[...]	[...]	[...]
Vectone	[...]	[...]	[...]	[...]	[...]	[...]
AH Mobile	[...]	[...]	[...]	[...]	[...]	[...]
Don't know yet, I would first try to get new information	[...]	[...]	[...]	[...]	[...]	[...]

Source: Panteia, 2018

table 104 You indicated that if you had not been able to choose for your current provider, you would have chosen for another one. Which provider would you have chosen?

	<i>Simpel</i>					
	18 – 24 year	25 – 34 year	35 – 44 year	45 – 54 year	55 – 64 year	65 year or older
KPN	[...]	[...]	[...]	[...]	[...]	[...]
Telfort	[...]	[...]	[...]	[...]	[...]	[...]
Simyo	[...]	[...]	[...]	[...]	[...]	[...]
XS4ALL	[...]	[...]	[...]	[...]	[...]	[...]
Ortel Mobile	[...]	[...]	[...]	[...]	[...]	[...]
Solcon	[...]	[...]	[...]	[...]	[...]	[...]
YES	[...]	[...]	[...]	[...]	[...]	[...]
Vodafone/Ziggo	[...]	[...]	[...]	[...]	[...]	[...]
Hollandsenieuwe	[...]	[...]	[...]	[...]	[...]	[...]
T-Mobile NL	[...]	[...]	[...]	[...]	[...]	[...]
Thuis	[...]	[...]	[...]	[...]	[...]	[...]
Ben	[...]	[...]	[...]	[...]	[...]	[...]
KNIPPR	[...]	[...]	[...]	[...]	[...]	[...]
Simpel	[...]	[...]	[...]	[...]	[...]	[...]
TELE2	[...]	[...]	[...]	[...]	[...]	[...]
InterNL net	[...]	[...]	[...]	[...]	[...]	[...]
Lebara	[...]	[...]	[...]	[...]	[...]	[...]
Lycamobile	[...]	[...]	[...]	[...]	[...]	[...]
Youfone	[...]	[...]	[...]	[...]	[...]	[...]
Vectone	[...]	[...]	[...]	[...]	[...]	[...]
AH Mobile	[...]	[...]	[...]	[...]	[...]	[...]
Don't know yet, I would first try to get new information	[...]	[...]	[...]	[...]	[...]	[...]

Source: Panteia, 2018

table 105 What sort of connection would you probably have chosen from this other provider

	<i>T-Mobile</i>					
	18 – 24 year	25 – 34 year	35 – 44 year	45 – 54 year	55 – 64 year	65 year or older
Prepaid	[...]%	[...]%	[...]%	[...]%	[...]%	[...]%
Contract	[...]%	[...]%	[...]%	[...]%	[...]%	[...]%
A contract for a combination of mobile and landline telecommunications and/or internet and/or tv	[...]%	[...]%	[...]%	[...]%	[...]%	[...]%
Other	[...]%	[...]%	[...]%	[...]%	[...]%	[...]%

Source: Panteia, 2018

table 106 What sort of connection would you probably have chosen from this other provider

	<i>Tele2</i>					
	18 – 24 year	25 – 34 year	35 – 44 year	45 – 54 year	55 – 64 year	65 year or older
Prepaid	[...]%	[...]%	[...]%	[...]%	[...]%	[...]%
Contract	[...]%	[...]%	[...]%	[...]%	[...]%	[...]%
A contract for a combination of mobile and landline telecommunications and/or internet and/or tv	[...]%	[...]%	[...]%	[...]%	[...]%	[...]%
Other	[...]%	[...]%	[...]%	[...]%	[...]%	[...]%

Source: Panteia, 2018

table 107 What sort of connection would you probably have chosen from this other provider

	<i>Simpel</i>					
	18 – 24 year	25 – 34 year	35 – 44 year	45 – 54 year	55 – 64 year	65 year or older
Prepaid	[...]%	[...]%	[...]%	[...]%	[...]%	[...]%
Contract	[...]%	[...]%	[...]%	[...]%	[...]%	[...]%
A contract for a combination of mobile and landline telecommunications and/or internet and/or tv	[...]%	[...]%	[...]%	[...]%	[...]%	[...]%
Other	[...]%	[...]%	[...]%	[...]%	[...]%	[...]%

Source: Panteia, 2018

table 108 Which provider did you have before you had your contract/connection with your current provider

	<i>T-Mobile</i>					
	18 – 24 year	25 – 34 year	35 – 44 year	45 – 54 year	55 – 64 year	65 year or older
KPN	[...]	[...]	[...]	[...]	[...]	[...]
Telfort	[...]	[...]	[...]	[...]	[...]	[...]
Simyo	[...]	[...]	[...]	[...]	[...]	[...]
XS4ALL	[...]	[...]	[...]	[...]	[...]	[...]
Ortel Mobile	[...]	[...]	[...]	[...]	[...]	[...]
Solcon	[...]	[...]	[...]	[...]	[...]	[...]
YES	[...]	[...]	[...]	[...]	[...]	[...]
Vodafone/Ziggo	[...]	[...]	[...]	[...]	[...]	[...]
Hollandsenieuwe	[...]	[...]	[...]	[...]	[...]	[...]
T-Mobile NL	[...]	[...]	[...]	[...]	[...]	[...]
Thuis	[...]	[...]	[...]	[...]	[...]	[...]
Ben	[...]	[...]	[...]	[...]	[...]	[...]
KNIPPR	[...]	[...]	[...]	[...]	[...]	[...]
Simpel	[...]	[...]	[...]	[...]	[...]	[...]
TELE2	[...]	[...]	[...]	[...]	[...]	[...]
InterNL net	[...]	[...]	[...]	[...]	[...]	[...]
Lebara	[...]	[...]	[...]	[...]	[...]	[...]
Lycamobile	[...]	[...]	[...]	[...]	[...]	[...]
Youfone	[...]	[...]	[...]	[...]	[...]	[...]
Vectone	[...]	[...]	[...]	[...]	[...]	[...]
AH Mobile	[...]	[...]	[...]	[...]	[...]	[...]
None; current provider was the provider from my first mobile connection onwards	[...]	[...]	[...]	[...]	[...]	[...]
Other	[...]	[...]	[...]	[...]	[...]	[...]

Source: Panteia, 2018

table 109 Which provider did you have before you had your contract/connection with your current provider

	Tele2					
	18 – 24 year	25 – 34 year	35 – 44 year	45 – 54 year	55 – 64 year	65 year or older
KPN	[...]	[...]	[...]	[...]	[...]	[...]
Telfort	[...]	[...]	[...]	[...]	[...]	[...]
Simyo	[...]	[...]	[...]	[...]	[...]	[...]
XS4ALL	[...]	[...]	[...]	[...]	[...]	[...]
Ortel Mobile	[...]	[...]	[...]	[...]	[...]	[...]
Solcon	[...]	[...]	[...]	[...]	[...]	[...]
YES	[...]	[...]	[...]	[...]	[...]	[...]
Vodafone/Ziggo	[...]	[...]	[...]	[...]	[...]	[...]
Hollandsenieuwe	[...]	[...]	[...]	[...]	[...]	[...]
T-Mobile NL	[...]	[...]	[...]	[...]	[...]	[...]
Thuis	[...]	[...]	[...]	[...]	[...]	[...]
Ben	[...]	[...]	[...]	[...]	[...]	[...]
KNIPPR	[...]	[...]	[...]	[...]	[...]	[...]
Simpel	[...]	[...]	[...]	[...]	[...]	[...]
TELE2	[...]	[...]	[...]	[...]	[...]	[...]
InterNL net	[...]	[...]	[...]	[...]	[...]	[...]
Lebara	[...]	[...]	[...]	[...]	[...]	[...]
Lycamobile	[...]	[...]	[...]	[...]	[...]	[...]
Youfone	[...]	[...]	[...]	[...]	[...]	[...]
Vectone	[...]	[...]	[...]	[...]	[...]	[...]
AH Mobile	[...]	[...]	[...]	[...]	[...]	[...]
None; current provider was the provider from my first mobile connection onwards	[...]	[...]	[...]	[...]	[...]	[...]
Other	[...]	[...]	[...]	[...]	[...]	[...]

Source: Panteia, 2018

table 110 Which provider did you have before you had your contract/connection with your current provider

	<i>Simpel</i>					
	18 – 24 year	25 – 34 year	35 – 44 year	45 – 54 year	55 – 64 year	65 year or older
KPN	[...]	[...]	[...]	[...]	[...]	[...]
Telfort	[...]	[...]	[...]	[...]	[...]	[...]
Simyo	[...]	[...]	[...]	[...]	[...]	[...]
XS4ALL	[...]	[...]	[...]	[...]	[...]	[...]
Ortel Mobile	[...]	[...]	[...]	[...]	[...]	[...]
Solcon	[...]	[...]	[...]	[...]	[...]	[...]
YES	[...]	[...]	[...]	[...]	[...]	[...]
Vodafone/Ziggo	[...]	[...]	[...]	[...]	[...]	[...]
Hollandsenieuwe	[...]	[...]	[...]	[...]	[...]	[...]
T-Mobile NL	[...]	[...]	[...]	[...]	[...]	[...]
Thuis	[...]	[...]	[...]	[...]	[...]	[...]
Ben	[...]	[...]	[...]	[...]	[...]	[...]
KNIPPR	[...]	[...]	[...]	[...]	[...]	[...]
Simpel	[...]	[...]	[...]	[...]	[...]	[...]
TELE2	[...]	[...]	[...]	[...]	[...]	[...]
InterNL net	[...]	[...]	[...]	[...]	[...]	[...]
Lebara	[...]	[...]	[...]	[...]	[...]	[...]
Lycamobile	[...]	[...]	[...]	[...]	[...]	[...]
Youfone	[...]	[...]	[...]	[...]	[...]	[...]
Vectone	[...]	[...]	[...]	[...]	[...]	[...]
AH Mobile	[...]	[...]	[...]	[...]	[...]	[...]
None; current provider was the provider from my first mobile connection onwards	[...]	[...]	[...]	[...]	[...]	[...]
Other	[...]	[...]	[...]	[...]	[...]	[...]

Source: Panteia, 2018

table 111 At many providers you can choose for a package that gives access to both mobile and landline communications for a set amount per month. Do you expect to consider such a package in future provider decisions?

	<i>T-Mobile</i>					
	18 – 24 year	25 – 34 year	35 – 44 year	45 – 54 year	55 – 64 year	65 year or older
Certainly	[...]	[...]	[...]	[...]	[...]	[...]
Probably	[...]	[...]	[...]	[...]	[...]	[...]
Probably not	[...]	[...]	[...]	[...]	[...]	[...]
Certainly not	[...]	[...]	[...]	[...]	[...]	[...]

Source: Panteia, 2018

table 112 At many providers you can choose for a package that gives access to both mobile and landline communications for a set amount per month. Do you expect to consider such a package in future provider decisions?

	<i>Tele2</i>					
	18 – 24 year	25 – 34 year	35 – 44 year	45 – 54 year	55 – 64 year	65 year or older
Certainly	[...]	[...]	[...]	[...]	[...]	[...]
Probably	[...]	[...]	[...]	[...]	[...]	[...]
Probably not	[...]	[...]	[...]	[...]	[...]	[...]
Certainly not	[...]	[...]	[...]	[...]	[...]	[...]

Source: Panteia, 2018

table 113 At many providers you can choose for a package that gives access to both mobile and landline communications for a set amount per month. Do you expect to consider such a package in future provider decisions?

	<i>Simpel</i>					
	18 – 24 year	25 – 34 year	35 – 44 year	45 – 54 year	55 – 64 year	65 year or older
Certainly	[...]%	[...]%	[...]%	[...]%	[...]%	[...]%
Probably	[...]%	[...]%	[...]%	[...]%	[...]%	[...]%
Probably not	[...]%	[...]%	[...]%	[...]%	[...]%	[...]%
Certainly not	[...]%	[...]%	[...]%	[...]%	[...]%	[...]%

Source: Panteia, 2018